

DOCUMENT RESUME

ED 341 423

JC 920 079

AUTHOR Anthony, Mary Anne
TITLE RSC Classroom Research Consortium Project:
1990-91/Year-Two Report.
INSTITUTION Rancho Santiago Community Coll., Santa Ana, Calif.
PUB DATE Aug 91
NOTE 214p.
PUB TYPE Reports - Research/Technical (143) -- Information
Analyses (070)

EDRS PRICE MF01/PC09 Plus Postage.
DESCRIPTORS Academic Achievement; Academic Persistence;
*Classroom Research; *Classroom Techniques; Community
Colleges; Computer Assisted Instruction; Consortia;
Cooperative Learning; Instructional Effectiveness;
*Instructional Innovation; Multicultural Education;
Program Descriptions; Student Journals; *Teaching
Methods; Two Year Colleges; Two Year College
Students

ABSTRACT

In 1989, a consortium of four community colleges in Southern California (i.e., Cerritos College, Mt. San Antonio College, Rancho Santiago College, and Rio Hondo College) received a Title III grant of \$2.5 million to support the development of innovative teaching and learning programs. The specific goals of the project are to increase the academic success and persistence of diverse students and to develop a model to train, pilot, and assess new classroom teaching and learning strategies. During the second year of the 5-year project, over 200 faculty were trained to pilot test and assess classroom methods; and pilot curricula were developed for computer-assisted instruction, cooperative learning, critical thinking, learning logs across the disciplines, classroom assessment and research, and library research with new technologies. Following a review of second-year project activities, the bulk of this report consists of narratives by faculty describing their application of various classroom research, assessment, and instructional techniques. Divided into six sections, the following reports are presented: (1) eight reports on the application of the Cross-Angelo classroom assessment technique; (2) six reports on cooperative learning efforts; (3) six reports on the use of learning logs; (4) three reports on multicultural instructional efforts; (5) two reports on computer-assisted instruction; and (6) nine reports on various techniques including multiculturalism, writing portfolios, and critical thinking. Applications for participation in the project and related discussion groups, and copies of consortia newsletters are included. (PAA)

* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *

ED341423

JC920079

RANCHO SANTIAGO COLLEGE
RESEARCH • PLANNING
RESOURCE DEVELOPMENT

Report

**RSC Classroom Research Consortium Project
1990-91/Year-Two Report
Mary Anne Anthony
August 1991**

"PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

M. A. Anthony

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)"

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

☐ This document has been reproduced as
received from the person or organization
originating it.

☒ Minor changes have been made to improve
reproduction quality.

* Points of view or opinions stated in this docu-
ment do not necessarily represent official
OERI position or policy.

INTRODUCTION TO THE CONSORTIUM
Sponsored by the Title III Consortium
"Classroom Research With Diverse Students"

WHAT THE CONSORTIUM IS:

The Title III Consortium is a federal, five-year grant of \$2.5 million to support the development of innovative teaching and learning projects at four Southern California community colleges:

- ♦ Cerritos College
- ♦ Mt. San Antonio College
- ♦ Rancho Santiago College
- ♦ Rio Hondo College (the Coordinating College)

THE GOALS ARE:

- ♦ To increase academic success and persistence of diverse students.
- ♦ To develop a model to train, pilot, and assess new classroom teaching and learning strategies.

WHAT THE CONSORTIUM DOES:

- ♦ Challenges faculty to focus on diverse students' needs.
- ♦ Creates a climate for inquiry about classroom learning.
- ♦ Responds to changing demographics and the colleges' mission.
- ♦ Empowers students and actively involves them in their learning.
- ♦ Practices useful tools for self-evaluation of teaching.
- ♦ Reduces burnout and motivates teachers and students.
- ♦ Professionalizes teaching and stimulates learning.
- ♦ Develops cost-effective programs to strengthen teaching and learning with limited funds and cooperative effort.

WHAT THE CONSORTIUM HAS ACHIEVED:

- ♦ Worked together to develop a shared model of classroom innovation on the four campuses.
- ♦ Shared consultants and expertise to increase cost-effectiveness of each local program.
- ♦ Trained over 200 faculty to pilot and to assess classroom methods.

- ♦ Developed training curricula for classroom pilots in:
 - ♦ Computer-Assisted Instruction
 - ♦ Cooperative (Collaborative) Learning
 - ♦ Critical Thinking
 - ♦ Learning Logs Across the Disciplines
 - ♦ Classroom Assessment and Research
 - ♦ Library Research With New Technologies
- ♦ Collected data from student and faculty surveys, reports, focus groups, and interviews that document progress and results.
- ♦ Provided follow-up activities to expand the impact of local projects.
- ♦ Provided stipends, re-assigned time, and other incentives to participants by specific contracts.
- ♦ Disseminated the Consortium model, its principles, and its results to numerous other colleges in California and other states.

WHAT THE CONSORTIUM WILL DO IN YEAR THREE (1991-92):

- ♦ Strengthen the assessment of pro-diversity curricula.
- ♦ Conduct two training projects across the four colleges: Critical Thinking Across the Disciplines and Learning Logs in the Social Sciences.
- ♦ Produce a video of students' voices on their uses of classroom assessment.
- ♦ Involve a wider range of faculty in local projects.
- ♦ Strengthen the systematic nature of collecting student and faculty feedback.
- ♦ Initiate ISW (Instructional Skills Workshop) training to local project participants.
- ♦ Establish strategies to fund the best of Consortium activities after Year Five (1994).

TABLE OF CONTENTS

	Page
Introduction to the Consortium	i
Year-Two Report	1
Overview	1-1
Project Model	1-2
Activities	1-3
Dissemination Activities	1-9
Evaluation	1-10
Summary: Looking Forward	1-14
Project Participants	2
Fall 1990	2-1
Spring 1991	2-2
Participants by Department	2-3
Project Reports	3
Cross-Angelo Classroom Assessment Techniques	3-1
Cooperative Learning	3-30
Learning Logs	3-49
Multicultural Curriculum Infusion	3-65
Computer Assisted Instruction	3-92
"Other" Projects	3-100
Application for Participation	4
Fall 1990	4-1
Spring 1991	4-4
Focused Discussion Groups	5
Application	5-1
Flyers	5-2
"Within the Classroom"	6
Volume 2, Number 1	6-1
Volume 2, Number 2	6-2
Volume 2, Number 3	6-3

YEAR TWO REPORT

OVERVIEW OF YEAR-TWO

1990-91 was the second year of Rancho Santiago College's participation in a five year project funded by a Title III grant. The grant was awarded to a consortium of four Southern California community colleges so they could work together towards the goal of improving teaching and learning among the ever increasing diversity of students found at the community college. Rio Hondo College is the consortium leader. Other members are Cerritos College, Mount San Antonio College, and Rancho Santiago College. Although the four colleges have been pursuing their goal through the use of various alternative teaching techniques, a common thread has been the use of Cross-Angelo classroom assessment techniques to evaluate the effectiveness of delivery modes and students' reactions to them.

Year One activities at RSC saw the training of three instructors in Cross-Angelo classroom assessment techniques. These three subsequently trained an additional twelve during the spring semester and oversaw their applications of Cross-Angelo classroom assessment techniques in their classes. The entire group of fifteen met periodically during the semester to discuss their assessments and the effects on both their students as learners and themselves as teachers. Additionally, the year was spent with other consortium members planning for the future of the project.

The enthusiasm generated by these first fifteen participants got several other faculty members interested in the project, and in Year Two, it grew both in numbers of participants and in types of activities. New activities included the use of Cooperative Learning, Learning Logs, Computer Assisted Instruction, and Multicultural Curriculum Infusion, as well as some individually designed classroom research projects ingloriously referred to as "Others". All in all, 29 instructors, representing 17 academic disciplines, took part in the Classroom Research Project in 1990-91. Overall, during 1989-90 and 1990-91, a total of 33 faculty have participated. Many others, both full-timers and part-timers, were exposed to project activities through attending flex classes, hearing reports by project participants at department meetings, and by reading the project newsletter "Within the Classroom".

PROJECT MODEL

The project activities have been directed by the Coordinator of Classroom Research, Mary Anne Anthony, on half-time release from the Mathematics department. The Classroom Research Project operates as a function of the Department of Research, Planning, and Resource Development, headed by Julie Slark, and is supported by the staff of the Research Office, especially Nga Pham who is the Grants Assistant.

All proposed activities and applications for participation are discussed and ultimately approved at monthly meetings of the Research Committee, and are then sent to the Planning Council for information purposes. The link to the Planning Council has been important in spreading the word about project activities throughout the various departments.

ACTIVITIES

All participants were required to attend a training workshop, to attend monthly meetings, to write one or more brief reports describing their particular classroom research activities, and to discuss their project at one of their own department meetings. Everyone was trained in Cross-Angelo classroom assessment techniques, and those who were experimenting with alternative teaching techniques used these assessments to evaluate the success of their projects. Participants in the Classroom Research Project signed "contracts" and received a stipend, ranging from \$250 to \$1000, for completion of their activities.

CROSS-ANGELO CLASSROOM ASSESSMENT TECHNIQUES:

Six instructors, representing the Art, Biology, Computer Science, Adult Basic Education, Continuing Education, and English departments, took part in the "Cross-Angelo" component of the Project in Fall '90. Two others, from Mathematics and Chemistry, joined the project in Spring '91. Each of these instructors attended the RSC flex workshop "If You Can't Understand Me, Raise Your Hand" to receive training in Cross-Angelo classroom assessment techniques. They all experimented with the assessments during the semester, trying out at least four techniques in their classrooms. At the group meetings of all classroom researchers, they shared their experiences with other instructors and gave each other suggestions for ways to revise and refine their assessments.

COOPERATIVE LEARNING:

Rio Hondo College sent one of their teachers experienced in the use of cooperative learning to train four RSC teachers prior to the start of the Fall '90 semester. The RSC teachers were from the areas of ESL, Human Development, and Mathematics. In the spring semester, the Mathematics instructor continued the use of cooperative learning in another one of her classes, and was joined by another ESL teacher and one from the English department. Bonita Jaros, one of the fall semester cooperative "researchers", trained the two new people during the January flex. Each of these instructors chose one of their classes to incorporate cooperative learning activities.

ESL students, in classes taught by Karen Dennis and Bonita Jaros, were formed into permanent groups to help each other with their writing, vocabulary, and pronunciation.

Students in Priscilla McCarty's Human Development 211, "Programs for Young Children", researched and presented reports in groups and role-played situations that would arise in their future employment in child care centers.

Cheryl Ooten's Trigonometry students spent one day each week working in study groups on mathematics problems, with the instructor acting as facilitator to the groups. In the spring semester, her trigonometry students used their study groups more extensively in class and doing more group board-work. Cheryl experimented with the effects of changing group membership versus keeping membership constant.

William Blake had his **English N61** and **English 101** (Freshman Composition) students work in teams of three to critique each others' essays. All instructors used Cross-Angelo classroom assessment techniques to measure the success of their projects and to solicit student suggestions for improvements.

LEARNING LOGS:

Three RSC instructors were trained by a teacher from Rio Hondo College in the use of learning logs at the start of the Fall '90 semester. One of them, in turn, served as trainer to three more teachers at the start of Spring '91.

Caroline Baca-Frye's Puente Project students in a section of **English 101**, which was team taught by Caroline (a counselor) and an English teacher, kept logs to record their thoughts on the collaborative process they were using in writing and revising papers. Students' reactions to a regional conference they attended with students from other community colleges in Southern California were also documented through the use of logs.

Continuing Education students in **Sherry Allen's Intermediate ESL** class were also introduced to learning logs. Initially, the instructor structured them formally into two columns where the students wrote on one side of the paper what they had done in class and on the other side they wrote their response to it. Midway through the semester the assignment was changed to having the students spend the last fifteen minutes of class writing about something they had heard or read or thought of during that class period.

Roseann Cacclola had her **English 061** students keep logs of their own assessment of their writing ability.

Gregory Pezzetti's Psychology 100 students were given chapter outlines with spaces on opposing pages to record class notes and reactions. Again, Cross-Angelo classroom assessment techniques were used to gauge the success of the projects.

MULTICULTURAL CURRICULUM INFUSION:

Multicultural curriculum infusion was a category of project activity included to address the project's goal of improving teaching and learning among the **diverse** student body, but it's implementation was not as well-defined as was the use of cooperative learning or

learning logs. The three instructors who participated in this category in Fall '90 were free to develop whatever they felt applied to the theme. They received some training (more accurately called sensitization) from a member of the Rio Hondo faculty and then discussed their projects several times during the semester with each other and the full group of classroom researchers.

Wayne Gibson assessed his **Intermediate Algebra** class at the start of the semester to determine whether there were any differences in the students' abilities to correctly solve certain types of mathematical problems according to the culture with which the students identified. Finding no significant differences, Wayne went on to develop a unit on the numeration of the Mayans and presented it in his class, in the hope that it would help his students achieve a greater understanding of our own number system.

Priscilla Leathers assessed students in her **Mental Health Nursing** class to find out what preconceptions students of various cultural backgrounds bring with them and to learn how their notions may have been altered as a result of their experiences in a hospital setting.

Fran Williams, an instructor of **Child Development**, had her students consider how they, as child-care providers, would deal with parents of different cultural backgrounds. The scenarios included estimating the amount of parental involvement, how a family would deal with a young child suffering from the common cold, and what to do if a child comes to day care repeatedly with bruises on his arms and back. Students were also asked to indicate, anonymously, which cultures they felt they needed more information about.

This category was not included among the Spring '91 activities. The Project Coordinator and the Research Committee agreed that since a major goal of the project was to deal with diversity, all participants should be sensitized to the issue and should try to incorporate assessments of a cultural nature into their projects. At one of the meetings of all classroom researchers, the participants brainstormed appropriate assessments to conduct in their classrooms.

COMPUTER ASSISTED INSTRUCTION:

Since two of our consortium colleges, Rio Hondo and Mt. SAC, were doing work with computer assisted instruction, the Research Committee decided that some spots in RSC's project should be made available to instructors who wished to experiment with and evaluate CAI in their classes in Spring '91. RSC was already making extensive use of CAI in a variety of disciplines, but we decided to see what the use of Cross-Angelo assessment techniques could add to CAI.

Two instructors were accepted to do CAI projects in the spring semester. It was not necessary for them to be trained in the use of CAI; instead they met with the Project Coordinator at the start of the semester to outline their plans. Both were advised to use

Cross-Angelo classroom assessment techniques and to try to determine if there were any perceived or actual differences among students of varying cultural backgrounds receiving instruction via computers.

Gregory Pezzetti prepared computer modules to supplement the text he used in his **Psychology 100** class. He then compared test performance of students who used the modules with that of students who did not; he found that the students who used the modules had slightly, though not significantly, higher test grades.

Jacqueline O'Lea teaches **Adult Basic Education** and evaluated the use of a new software package in her language arts program. She assessed both student improvement and attitude, and received much positive feedback in both categories.

TEACHING AND LEARNING IN THE COMMUNITY COLLEGE:

In the spring semester, Rio Hondo College hosted a class, "Teaching and Learning in the Community College", taught by Dr. Tom Angelo. All four consortium colleges were invited to send faculty members to the weekly class.

Three RSC instructors, **David Hartman**, **Don Roylance**, and **Myrna Sorensen**, completed the class. At the monthly classroom researchers' meetings, they shared the latest information and readings from the class. They are working together to develop a staff development class that will be offered in January 1992 to all RSC faculty and staff.

"OTHER" PROJECTS:

In both the fall and spring semesters, project proposals were accepted that did not fit neatly into any of the above categories. These projects became known as "others"; generally, they combined aspects of two or more of the categories and they all included the use of Cross-Angelo classroom assessment techniques. Four "other" projects were conducted in Fall '90 and five in Spring '91.

Betty Dixon did an "other" project both semesters. In the fall semester, she asked her **English 061** (one level below Freshman Composition) students put together **portfolios** of their best writing samples throughout the semester. This gave the students valuable experience in evaluating their own writing and in accomplishing long-term assignments. In the spring semester, she taught the same group of students in a **English 101 class**, (Freshman Composition) and asked them to complete **guided research papers**, in which they chose research topics from a list generated by the instructor and used her files of source material to gather information. Betty set frequent deadlines for completion of preliminary steps, met individually with the students, and had her students keep records

of their progress and their reactions to the conferences with their instructor. All 29 students who were enrolled in this section were Latino; one eventually dropped the class, but, of the rest, every single student submitted a research paper on the due date!

Marillou Morris and **Melinda Womack**, two instructors in the **Speech Communications** department who were among the three initial RSC Cross-Angelo trainees, did a project in Fall '90 to identify what teacher and student behavior students like and dislike in their classes. They administered assessments and questionnaires in three sections of their classes, and focused especially on the responses of their **re-entry students**.

Charlene Pearson did her research project on the **critical thinking skills** of students in her Fall '90 **Introduction to College** class. She found no significant differences among critical thinking skills due to a student's age, sex, ethnicity, completed education, or educational goals.

A special "other" project was funded in the fall semester through which mathematics instructor **Myrna Sorensen** hired student tutors to act as learning facilitators in study groups which her **College Algebra** students attended outside of class. The facilitator attended class sessions and met with the instructor weekly. Assessments were conducted throughout the semester to determine the effectiveness of the study groups and to see if there had been any change in student attitudes and study habits.

In the spring semester, **Sherry Allen** focused two of her **ESL** classes on issues relating to **cultural diversity**. She discovered students representing 15 different nationalities in one class, and they frequently discussed their various cultures. Sherry used Cross-Angelo classroom assessment techniques to ask her students what they had learned about other cultures and what they would like to learn more about. She also had her students keep journals in which they were encouraged to write about the feelings they have about other cultures.

Karen Dennis also teaches **ESL** for RSC and, like Sherry, concentrated her project on issues pertaining to **cultural diversity**. She had students in her **Intermediate ESL** class describe how they remembered receiving written feedback in class and being taught new vocabulary words in their countries. They also discussed the various uses and meanings of similar words in different countries. She assessed the students to discover how they preferred to study vocabulary words in her class (by computer, discussion groups, using visuals from magazines, or sentences).

Students in **Caroline Baca-Frye's Career and Life Planning** class saw two films on the subject of discrimination. Following each film, the students participated in small group discussions and completed a written assignment. Caroline then used classroom assessments to evaluate whether or not students' attitudes towards those of ethnic minority groups had changed for the better.

Wayne Gibson continued his exploration of possible **cultural differences** in mathematical performance by administering a non-verbal test of reasoning (The Raven Standard Progressive Matrices) to 38 students in his **Intermediate Algebra** class. He analyzed the

results according to the students' sex, ethnicity, and performance on several class assessments that required varying degrees of reasoning. Wayne discovered that the 20 men in his class did significantly better than the 18 women on the Raven test.

Terry Tomlinson, who teaches **High School Subjects**, conducted three assessments in his class in the spring semester. He evaluated the students' perceptions of the effectiveness of small learning groups, the physical setting of his classroom, and the textbook check-out system. He has made changes in his classroom as a result of these assessments and let administrators know what the students prefer.

FOCUSED DISCUSSION GROUPS:

In the spring semester, six focused discussion groups were scheduled for an hour each at various times during the semester. Former project participants acted as facilitators for the groups. Each received a stipend of \$250 in return for preparing for the discussion, recruiting participants, and writing a brief summary afterwards. Two of the discussion groups were subsequently canceled due to lack of time on the part of the facilitator. The four discussion groups that did meet were:

- ♦ *"Creating a community in the community college classroom!"*
- ♦ *"Fundamental missing elements in schooling today -- thinking students?"*
- ♦ *"Testing issues -- open book, notes, take home, frequency -- benefits and drawbacks."*
- ♦ *"Diversity vs. Division"*

Attendance varied considerably, from a low of 5 to a high of about 25 and all attendees questioned agreed that the discussion hour had been time well-spent talking over useful issues with their colleagues.

DISSEMINATION ACTIVITIES

RSC classroom research consortium project participants spoke at a number of professional conferences during 1990-91:

- ♦ **Grace Tanaka and Karen Dennis** spoke on the subject of "Classroom Research Techniques" at the April 1991 annual meeting of the California Association of Teachers of English to Speakers of Other Languages (CATESOL).
- ♦ **Nga Pham and Mary Anne Anthony** spoke at the annual California Institutional Researchers conference at Asilomar in April 1991. Mary Anne gave a brief overview of Cross-Angelo classroom assessment techniques and RSC's project activities, and Nga spoke about the role of the research office in a project such as this one.
- ♦ In April, **Betty Dixon, Karen Dennis, Bonita Jaros, Wayne Gibson, Jacque O'Lea, Greg Pezzetti, Melinda Womack and Mary Anne Anthony** presented a panel discussion of the use of classroom research in their disciplines and then facilitated dinner-table discussion with high school teachers from the Santa Ana Unified School District. This meeting was sponsored by FIPSE as part of the STEP project of which RSC is a member along with Santa Ana Unified, UC Irvine, and CSU Fullerton.
- ♦ In June, **Mary Anne Anthony** was on a panel with members of the consortium from Rio Hondo College at the American Association of Higher Education (AAHE) Assessment Convention. She spoke of the effects of classroom assessments on students and teachers.
- ♦ **Julie Stark, Marliou Morris, and Karen Dennis** travelled to Greensboro, North Carolina in late June to present at the "Effectiveness and Student Success: Transforming Community College for the 1990's" Conference. They described the project, Cross-Angelo classroom assessment techniques, and their impact on the classroom.
- ♦ **On campus**, formal dissemination took place during the August and January flex workshops. The Applied Arts and Sciences faculty was treated to an introduction to Cross-Angelo classroom assessment techniques and the part-time mathematics faculty attended a two-hour workshop on the use of classroom assessments in mathematics.

EVALUATION

"I've always taught using a traditional lecture-discussion style. I am now getting my students more actively involved in organized small group activities which are working really well! The students are applying course concepts & learning from each other. I am constantly aware of how effectively my students are learning and can make adaptations when needed. I still believe that students are responsible for their own learning, but I now feel more responsible for constantly monitoring that learning and not just measuring it for their grades -- that's quite a philosophical shift."

The words of the teachers involved in this project best describe the effects of participation on them and their students. By and large, the teachers have been overwhelmingly enthusiastic about their projects and anxious to expand on them -- to include all of their classes, to do further experimentation with collaborative learning or learning logs, and to delve deeper into the area of cultural diversity.

A questionnaire was sent out in Spring '91 to those who had participated in the project in Spring '90 and/or Fall '90 in order to investigate whether the effects of the project were sustained beyond the originated semester. All instructors who did Cross-Angelo classroom assessment techniques in their first semester of the project; 13 of 15 respondents indicated they continued to use these assessments in Spring '91.

Seven out of eight respondents answered "yes" to the question, "If you participated in cooperative learning or learning logs or multicultural curriculum infusion last semester, have you used this method in your classes this semester?" Each semester all the participants have been exposed at monthly meetings to the whole variety of projects being funded; there were seven "yeses" and seven "noes" to the question, "Have you used methods other than the one for which you received your stipend?" (Four said they were still using Cross-Angelo classroom assessment techniques, two said collaborative learning, one said "a form of learning logs", one said multicultural curriculum infusion, and one admitted to adapting several of the student surveys colleagues had used the semester before.)

When asked if their participation in this project has affected their current teaching methods in other ways, 13 out of 14 respondents agreed that they had been affected and then went on to elaborate in comments such as the one at the top of the page.

In order to specifically evaluate the effects of **Cross-Angelo classroom assessment techniques** on students, it was suggested to the project participants that they ask their students at the end of the semester how they felt about the use of these assessments. Cheryl Ooten asked her trigonometry class (Spring '91) "How do you feel about my asking you all these questions during the semester and asking you to write your answers anonymously on cards?" and got the following replies:

"I feel that it is good because it gives you an idea of all the students' ideas. It just helps you a little more to understand the students."

"It makes me feel good that I have a teacher that cares about the way she teaches for the student. Keep on doing it because the student will feel more pleased and willing to work, without feeling lonely and confused."

"I feel it is important that you ask questions of us because when you find out what helps us better, we learn better and in return you become a better teacher."

"By being asked these questions, I see a teacher who cares. Therefore, this will encourage me to work harder."

Cheryl, reacting to the students' favorable comments, said *"This overwhelmingly positive response to the cards motivates me to continue to use them in the future whenever I want feedback from the students."*

Jane Francis reflected on her first semester's experimentation with classroom assessments:

My students found out, I believe, that I really was interested in what they had to say ... and they were very interested to hear how their fellow students had responded to the questions put forth. I do feel that the anonymous nature of the assessments allowed my students to be open and honest. I don't believe that I would have received 'quality' information from some of them if they had to identify themselves when responding."

Ethel Jordan, who teaches Reading and Adult Basic Education, commented on the changes classroom assessments caused in her students:

"Perhaps the most powerful one for my students was the enhanced feeling of freedom to express opinions. The idea of anonymously reporting about learning was a new one to most of them. I also think that they have a deeper understanding of my concern for their success."

All of the instructors doing **cooperative learning** found their experiment to be a worthwhile endeavor. They expressed some skepticism at the idea right after their initial training workshop, but then were surprised to find things working, in general, better than had been expected. Grace Tanaka, an ESL teacher in the Continuing Education division, won several converts to cooperative learning when she stated:

"The concept of permanent cooperative learning groups functioning effectively in an open/entry open/exit ESL class was inconceivable to me before I embarked on this project. I am a believer! Permanent grouping does work and does enhance the teaching/learning environment."

Grace, and others, reported that an added effect of forming permanent cooperative groups was a very high persistence rate.

The teachers using **learning logs** were also very positive about the benefits of this technique. The comments of English teacher Elizabeth Macey were common to all who tried learning logs:

"I found the journals very helpful in a variety of ways. To begin with, the students kept up with the reading assignments (for the most part) because they had to write in the journals. Secondly, the sharing of journals provided insight and information, but a more important payoff for me was the interaction and camaraderie that resulted from reading each other's comments. Also the journal entries provided a good springboard to the discussion ... Moreover, the journal provided an opportunity for students to do a lot of writing (which English teachers are convinced they need) without having to worry about a misplaced comma or a dangling modifier. The negative aspects were the large amount of time needed when I collect the journals and respond to their writing. Nevertheless, reading the journals and writing to the students is pleasant because it provides me an opportunity to react on a one-to-one level, so the time is well spent."

Although each of the teachers doing projects involving **multicultural curriculum infusion** approached the topic from a different angle, all found the experience to have been well worth their efforts. In addition, their projects stimulated interesting and valuable discussion on the subject of diversity at the meetings for all project participants.

Results from the two instructors using **computer assisted instruction** were also positive. Greg Pezzetti, who wrote and evaluated CAI modules to accompany his Psychology text, found slightly higher final exam performance by students who had been through the modules than those who had not. Jacque O'Lea experience computer hardware difficulties in the middle of her project; despite this, students in her Adult Basic Education program increased their reading level an average of about three years. *"Best of all,"* Jacque said, *"The students unanimously responded positively, even those who had been 'computer-phobic'. I believe this was due in large part to the fact that they could see immediate results. When students were tested for advancement to the high school program, all of the students who completed (or were close to completing) the programs received sufficiently high scores to enter the high school subjects program."*

The three instructors who attended **"Teaching and Learning in the Community College"** agreed that they had never worked so hard for a single class. Their readings and class discussions have provided impetus for many thought-provoking conversations with their RSC colleagues. We all look forward to the flex workshop they are developing for next winter!

The nine **"other" projects** are a tribute to the inquisitiveness and industriousness of the RSC faculty. Although one might conclude after reading their final project reports that the amount of time and effort spent on the projects varied considerably from person to person, discussions with the teachers involved would show that all projects involved a

considerable amount of time for planning and implementation. Several of these classroom researchers have become workshop leaders in various RSC staff development activities in 1990-91 and 1991-92 in order to share their findings with their colleagues.

Of all the activities sponsored by this project, the only disappointment was the **focused discussion groups**. There were faculty members who came up with excellent ideas for discussion and were willing to serve as facilitators, but the discussion sessions were poorly attended. Those who did attend the sessions found the discussions to be worthwhile, and perhaps a group of six to twelve is the best way for everyone to have a chance to speak, but the Project Coordinator had hoped for a greater response. Also, the Coordinator regretted not having given the facilitators greater guidance as to what she expected the format of the sessions to be like, especially as she sat in on two of the sessions that resembled a traditional classroom lecture -- not quite the lively discussion of issues that she had envisioned, but, nevertheless, useful information and ideas flowed throughout the room.

SUMMARY: LOOKING FORWARD

The primary goal of this 5-year project is to improve teaching and learning among the ever increasing diversity of students. A variety of teaching strategies -- cooperative learning, CAI, learning logs, and others -- have been utilized in an attempt to provide our diverse student population with enhancements to the traditional lecture.

Through the use of Cross-Angelo classroom assessment techniques **students** are active participants in their own learning process. They are learning that their voices and opinions really counts:

- ♦ In classes that use **cooperative learning**, students are gaining communication and organizational skills that will be imperative for their success in the workplace.
- ♦ Students using **learning logs** have been constantly monitoring their own learning and recording what works best for them and why.
- ♦ An unanticipated outcome of **computer assisted instruction** is that some computer-phobic students come to see the computer as a useful tool to help them gain their educational objectives; we hope that they will take this attitude of "the computer as a useful tool" with them to their jobs.
- ♦ Students in classes that focused on **multicultural curriculum infusion** activities learned a heightened interest in and respect for the differences that exist among various cultures and indicated a desire to learn more about their fellow students.

Overall, it could be said that the students of teachers who participated in the various activities of this project have become more **empowered** learners, empowered in the sense of becoming aware of what their particular learning needs are and making their voices heard so that their learning needs are addressed.

Teachers are more actively involved in their own teaching, too, by constantly asking themselves how to effectively reach the diversity of students they see daily in their classrooms and by questioning their students to determine what learning style works best for each of them. Individually and in group discussions, teachers are practicing self-evaluation of their own teaching and how their teaching affects the learning of their students.

It could be argued that the teachers who became interested in participating in this project were drawn to the project because they already were genuinely concerned about issues related to teaching and learning; through their participation, however, this concern has

broadened throughout the college and, through their extensive dissemination activities, both in conjunction with Staff Development and independently, interest has spread to many other instructors on all RSC campuses.

WHAT WILL YEARS THREE, FOUR, AND FIVE HAVE TO ADD TO THIS BASE?

- ♦ We would like to **broaden involvement** of faculty member groups unrepresented in this project. Several "repeat" participants did not apply for Fall '91 activities and let the Project Coordinator know that their lack of participation was in order to "free up spaces" for new people.
- ♦ Year Three activities should be similar to Year Two: **Cross-Angelo classroom assessments, cooperative learning and learning logs and "other"**, with the **theme of cultural diversity overlaying all projects**. A new activity will be to have **two instructors in different disciplines collaborate to pair their classes** several times during the semester in order to demonstrate the interdisciplinary nature of their courses.
- ♦ We will continue to transmit to others the sense of the vibrancy and enthusiasm that permeates both the classes whose teachers have been involved in this project and the participants' group meetings and discussions. To this end, a **videotape** of the project will be produced.
- ♦ The project newsletter, **"Within the Classroom"**, will continue to be published and disseminated campus-wide to keep the college informed about activities and opportunities for involvement.
- ♦ It is our desire to set up a **teaching library**, where, in addition to having the latest issues of periodicals dedicated to teaching, all of the instructors' project reports will be housed so that their colleagues will be able to sit down, browse, and become inspired to adapt similar experiments to their own classes.

PROJECT PARTICIPANTS

Classroom Research Participants

Fall 1990

Sherry Allen	Learning logs
Caroline Baca-Frye	Learning logs
Karen Dennis	Collaborative
Betty Dixon	Other
Wayne Gibson	Multicultural
Dan Goldmann	Cross-Angelo
Mayde Herberg	Cross-Angelo
Bonita Jaros	Collaborative
Ethel Jordan	Cross-Angelo
Lynda Kennedy	Cross-Angelo
Priscilla Leathers	Multicultural
Elizabeth Macey	Cross-Angelo
Priscilla McCarty	Collaborative
Marilou Morris	Other
Jacque O'Lea	Cross-Angelo
Cheryl Ooten	Collaborative
Charlene Pearson	Other
Gregory Pezzetti	Learning logs
Myrna Sorensen	Other
Fran Williams	Multicultural
Melinda Womack	Other

Classroom Research Participants

Spring 1991

Sharon Allen	Multicultural
Caroline Baca-Frye	Multicultural
William Blake	Collaborative
Roseann Cacciola	Learning Logs
Karen Dennis	Multicultural
Betty Dixon	Other
Jane Francis	Cross-Angelo
Wayne Gibson	Multicultural
David Hartman	Teaching...Class
Bonita Jaros	Learning Logs
Elizabeth Macey	Learning Logs
Sun Ok Myong	Cross-Angelo
Jacque O'Lea	CAI
Cheryl Ooten	Collaborative
Gregory Pezzetti	CAI
Don Roylance	Teaching...Class
Myrna Sorensen	Teaching...Class
Grace Tanaka	Collaborative
Terry Tomlinson	Other

Classroom Research Participant by Department

Adult Basic Education:

Ethel Jordan - Cross-Angelo
Jacque O'Lea - Cross-Angelo & CAI

Art:

Mayde Herberg - Cross-Angelo

Biology:

Dan Goldmann - Cross-Angelo

Chemistry:

Sun Ok Myong - Cross-Angelo

Computer Information System:

Lynda Armbruster - Cross-Angelo

Counseling:

Carolina Baca-Frye - Learning logs &
Multicultural
Charlene Pearson - Other

English:

William Blake - Collaborative
Roseann Cacciola - Learning Logs
Betty Dixon - Other (2)
Bonita Jaros - Learning Logs &
Collaborative
Elizabeth Macey - Learning Logs &
Cross-Angelo

ESL:

Sharon Allen - Learning logs &
Multicultural
Karen Dennis - Multicultural &
Collaborative
Grace Tanaka - Collaborative

Fire Technology:

Don Roylance - Teaching...Class

High School Subjects:

Terry Tomlinson - Other

Human Development:

Priscilla Leathers - Multicultural
Priscilla McCarty - Collaborative
Fran Williams - Multicultural

Mathematics:

Jane Francis - Cross-Angelo
Wayne Gibson - Multicultural (2)
Cheryl Ooten - Collaborative (2)
Myrna Sorensen - Teaching...Class &
Other

Political Science:

David Hartman - Teaching...Class

Psychology:

Gregory Pezzetti - Learning logs &
CAI

Speech Communication:

Marilou Morris - Other
Melinda Wornack - Other

PROJECT REPORTS

CROSS-ANGELO ASSESSMENTS

by

Lynda Armbruster - CIS

Jane Francis - Mathematics

Dan Goldmann - Biology

Mayde Herberg - Art

Ethel Jordan - Adult Basic Education

Elizabeth Macey - English

Sun Ok Myong - Chemistry

Jacque O'Lea - Adult Basic Education

During the Fall Semester, I have used various Classroom Research techniques during all my classes, but for this report, I have specifically focused on two sections of BUS/CIS 150, Introduction to Information Systems & Computer Programs. One class is taught M/W/F at 10 am, the other on Tuesday evenings at 7 pm.

At the beginning of the first class meeting, I distributed a Student Background Survey. My goal was to determine to what extent (if any) my teaching approach should vary between day and evening classes. I did discover some significant differences, although there were more similarities. Determining the students' backgrounds at the beginning of the semester helped me determine what level they were capable of understanding, how quickly I could cover material and what special barriers might be affecting their learning. I also think it made them feel more like individuals and less "like a number".

Another project involved student "ice breakers"; the first focused solely on a non-subject-related "getting to know each other" activity the first night of class. I used Paired Introductions and did one "Team" activity. I received many comments from students, verbally and on 3x5 cards used later, that indicated they were grateful for the opportunity to meet and get to know each other. Most comments indicated they felt more comfortable in the classroom. Two students indicated they did not like the activities. In general, the evening class had a more positive reaction than the day class. This could be explained, at least in part, by the differences in background that I discovered during the first project. The day class had more students who were in their first college classes and/or who learned English later in life.

I had thought that making the classroom more friendly would increase attendance and motivation to learn; in fact, the drop rate seemed smaller and students seemed more willing to participate in questioning me during and after lectures than classes where I had not done this activity.

I had other "group activities" later in the semester involving discussions related to the subject matter. Feedback regarding these was mixed; the evening class definitely felt they were worthwhile, the day class definitely thought they were a waste of time. In the day class, fewer students were prepared to discuss a subject so the groups were often dominated by one or two people, with the others passively listening. The evening students were generally more prepared, both socially and scholastically, to discuss topics. They were also a lot more spontaneous in group problem-solving and encouraging each other to complete the work. By the end of the semester, about 2/3 of the evening students were involved in one of several study groups they formed under their own initiative to meet before class or on weekends.

I also used 3x5 cards later in the semester for feedback on several occasions to determine if there was anything I could change to improve the course and/or enhance student learning. I seriously considered all the suggestions I received, making adjustments where possible and/or practical. This also seemed to have the effect of helping my students feel special and, in turn, improved their attitudes and increased motivation to learn the material.

Conclusions

I definitely believe that using the various Classroom Research techniques had a positive effect on my classes. I think the drop rate was lower (one class only had 2 drops, going from 44 to 42 at semester's end). The two techniques that seemed to impress them the most were the Introductions at the beginning of class and the 3x5 cards for "More Of/Less Of". I feel I benefited tremendously from the Background Survey because it helped me understand some of the different reactions between classes to other teaching methods.

In future classes, I will continue to use many of the techniques I learned as a result of participating in this project.

I used the Cross-Angelo "clearest-muddiest" technique for the first assessment in my Math 050 (Elementary Algebra) classes, and got some interesting results.

When I did the assessment in my Mon-Wed class, I got very short, vague responses from my students. I had given no directions prior to distributing a brief questionnaire and was disappointed to find that the students weren't very focused when they responded. We had covered word problems that day and most of the students simply wrote "word problems" when asked what the muddiest concept was. This really didn't help me much in trying to decide just what aspect of word problems was the muddiest! I learned from this to ask for specifics and to tell the students that I truly was interested in serious responses as well. When I administered these same questions to my Tue-Thu class, I got many more specific responses to both the "clearest" and "muddiest" questions.

After questioning my students about clearest/muddiest, I asked students in both classes to rank their anxiety level on a scale of 1 to 5, 1 being not anxious and 5 being extremely anxious. Out of 71 student responses, the results are as follows:

	<u>Anxiety Level</u>				
	1	2	3	4	5
Number of students	7	11	38	9	6

I was somewhat relieved to find a small number of students on the high end of the scale, especially since that wasn't the impression I had been getting in class. Before I asked this question, I would have guessed many more students to be on the high anxiety level end of the scale. This convinced me that while I think I "read" my students pretty well, there are things that I really don't know about individuals while focusing on the class as a whole.

What part of the material covered today made the MOST sense to you?

What part made the LEAST sense to you?

Please rate your anxiety level in this class from 1 to 5, with 1 being not anxious at all and 5 being extremely anxious. Circle.

1 2 3 4 5

My second assessment was done at about mid-term time. Basically, I asked my students to evaluate their own progress/success in the course by answering the questions on the following page. I have indicated the number of responses (out of a total of 65 students) to each question in the blanks to the left of each response. I have not represented the students who gave multiple responses. In addition, I cross-referenced pairs of questions, with the responses to those following the questionnaire.

Please check the response which BEST describes you. Be honest!

1. About how many hours each week do you spend outside of class time on this course?

12 less than 3 hours
23 more than 3 but less than 6 hours
18 more than 6 but less than 9 hours
7 more than 9 but less than 12 hours
4 more than 12 hours

Note: Students indicating multiple responses are not represented here.

2. Most of the time, do you work on homework problems

47 alone?
5 sometimes with other students?
1 always with other students?
8 with someone other than a student who can help you?

3. Most of the time, are you

27 keeping up with homework assignments?
28 somewhat behind on homework?
7 very behind on homework?
 not doing homework at all?

4. Most of the time, do you study for tests

49 alone?
7 with others?
4 not at all?

5. Right now, what is your best estimate of your current grade in the course?

17 A 19 B 20 C 4 D 2 F

6. Are you satisfied with your current grade?

34 yes

29 no. If no, what do you think can be done to improve your grade? Be specific!

(responses to this last question are on the next page)

Responses to "what do you think can be done to improve your grade?" :

1. I'm afraid math takes such a big chunk out of my full day that I put it on the back burner - after the job, the family, church and community obligations and other reading assignments. If I consistently devoted 2 hours daily to new concepts, I'm sure I'd fare better. You are definitely not the problem!
2. Nothing from the teacher, I have to try harder.
3. I am getting more personal tutoring and keeping up w/hw better.
4. Work harder on more difficult problems on the practice test! More of those problems on the practice test.
5. Extra credit.
6. Study.
7. Get with it.
8. Study more!
9. Perhaps work harder and try my best.
10. Study more often!
11. Kinda, I thought I could do a little better, but with this new stuff I think I can forget that. I'll take a C.
12. I need to study and do more homework. I also did not understand graphing very well.
13. I missed one class during section 3.4 and 3.5 and I did a total backslide on the last test because of it. If you could review one graphing problem every class it would be very helpful. Between work and school and homework, there's no time for tutors.
14. I'm not sure. I tend to make small mistakes in arithmetic. I think a programmed learning aid on computer might help, like in the lower math courses.
15. I think I should make more time to spend in this course, so I won't fall behind on homework and I'll be on the top of everything that is being covered in class.
16. I feel I can do better, but I am trying too hard and feel so tense that I can't think straight.
17. Crack down on myself and study a lot more. Be on time with things to take pressure off myself. I also need better attendance. I need to not let my personal life cause me to leave early.
18. I need to study for the test, not just rely on memory.
19. More time studying. Less time homework.
20. I really want to bet a B in the class.
21. Put in more study time and possible get help from another.
22. Because I think its too hard for me to understand.
23. Study more. Get more outside help.
24. Try to spend more time with someone who help me understand the material.
25. Study harder 4 tests.
26. More lecture time and more time in class for questions to secure the concepts before leaving.

Time outside of class vs grade in the course:

time/grade	A	B	C	D	F
less than 3 hours	5	0	5	0	0
3 to less than 6	5	7	9	1	1
6 to less than 9	3	8	3	2	0
9 to less than 12	3	0	3	1	0
more than 12	1	2	0	0	1

It didn't seem to make much difference on the high and low ends of the grading scale how much time was spent outside of class on course material, but the "C" students definitely did not spend much time outside of class.

Keeping up with homework vs grade in the course:

keeping up/grade	A	B	C	D	F
keeping up	12	6	6	1	0
somewhat behind	3	10	11	2	2
very behind	2	1	3	1	0
not doing homework	0	0	0	0	0

Apparently all of the students participating in this assessment were doing some homework. I found it very interesting that the "A" students were keeping up with the homework, but that more of the B and C students felt that they were somewhat behind in homework most of the time. I hope that sharing these results with my students "hinted" at the importance of doing and keeping up with homework.

Satisfied with grade vs grade in course:

satisfied/grade	A	B	C	D	F
yes	12	10	5	0	0
no	0	7	14	4	2

I was relieved to see that most of the "C" people were not content to be getting a C - at least they would like to be doing better, even if that wasn't happening at the time.

Time outside of class vs keeping up with homework:

time/keeping up	keep up	somewt behind	very behind	not doing HW
less than 3 hours	8	1	2	0
3 to less than 6	9	13	1	0
6 to less than 9	6	7	3	0
9 to less than 12	4	2	1	0
more than 12	0	4	0	0

It was interesting to note that most of the students who were behind were spending less than 9 hours per week outside of class. While these results did not surprise me, it was valuable to be able to share these results with the students, so that they could see the correlation between time spent (or not spent) outside of class and being able to stay caught up with the assignments.

Do not write your name!

Please check the response which BEST describes you. Be honest!

1. About how many hours each week do you spend outside of class time on this course?

☐ less than 3 hours
☐ more than 3 but less than 6 hours
☐ more than 6 but less than 9 hours
☐ more than 9 but less than 12 hours
☐ more than 12 hours

2. Most of the time, do you work on homework problems

☐ alone?
☐ sometimes with other students?
☐ always with other students?
☐ with someone other than a student who can help you?

3. Most of the time, are you

☐ keeping up with homework assignments?
☐ somewhat behind on homework?
☐ very behind on homework?
☐ not doing homework at all?

4. Most of the time, do you study for tests

☐ alone?
☐ with others?
☐ not at all?

5. Right now, what is your best estimate of your current grade in the course?

☐ A ☐ B ☐ C ☐ D ☐ F

6. Are you satisfied with your current grade?

☐ yes
☐ no. If no, what do you think can be done to improve your grade? Be specific!

The third classroom assessment I did with my Math 050 classes took place about three weeks before final exam week. I gave the students a list of topics we had covered this semester and asked them to choose the three topics they found most challenging, to be emphasized in class during our final exam review time in class. Since it is virtually impossible to review the entire semester in three hours (!), I chose the topics most asked for from the list I provided. I wrote four different worksheets covering the various topics and had the students work in groups on these problems. Our classroom review is going on even as I write this report, and I have found it to be well-received by the students. I have also had the opportunity to help various individuals as they work the problems. I have rarely had time to do this during the course of the semester.

This assessment had a second part. I asked my students two questions about the upcoming final exam so that I could get some idea of how they felt about having a departmental final and how they felt about the fact that this final would be multiple choice.

Question 1: Do you like the idea of the same final exam being given to all Math 050 students? Why or why not?

Question 2: Since none of our tests have been multiple choice, are you comfortable or uncomfortable in knowing that the final exam is multiple choice?

The responses to these questions appear on the following pages.

Responses to the question: Do you like the idea of the same final exam being given to all Math 050 students? Why or why not?

1. I feel it should not be. Reason because the test can be given to others.
2. Yes, because you can study in a group for same test.
3. I like the idea because I can study w/Math 050 students from other classes.
4. Yes, because that way (hopefully) the teachers won't skip impt topics that students will need for 080 and it will be easier for teachers to assess where they need to give more instruction.
5. I don't like the idea because that may result in cheating which at the present time may make the student feel good about their test result, but later on will affect his academic advancing.
6. Yes, then everyone has the same test presented to them. All the teachers need to coordinate their efforts, I guess. Cheating might be a consideration of some tests - but I would think that would be rare.
7. Yes. Makes it easier for teachers, admin. to get students grades out quicker.
8. Yes, because I can work with my other friends.
9. I don't like it because we are not in Math 060.
10. No - because some classes have to skip some things or go over them briefly because of holiday or time constraints.
11. Yes, because it's easy for you to correct the answers.
12. No - because every teacher instructs in a different manner, consequently the final may have material on it that seems foreign to some students.
13. Yes. It is a better way to see if different teachers accomplish the same result.
14. Yes, Math 050 is Math 050 and all 050 classes should cover the same topics, so the final should be the same.
15. No. Because each teacher has not teaching in the same way.
16. Yes. Everybody the same.
17. Yes, because I can study with somebody from another class.
18. Yes, because it will be easier to get the answers, study with other people.
19. Sure, why not.
20. Yes - equality (sounds fair). (I would like it better if Y-O-U made it up for ALL m-50 students.)
21. No, because they have studied different than us.
22. No, because each teacher may vary in their emphasis in teaching math.
23. Yes, so I don't feel as if maybe I got the harder exam, it may seem harder although they should be equal.
24. I like it. That way it's the same for everyone.
25. No - because some teachers may cover areas that are not stressed as much on the final.
26. Yes. Everyone has the same chance of passing.
27. I don't care either.
28. Yes. Equality of evaluation.
29. Yes, because then all students should know the same material.
30. Yes. Everyone is equal going on into upper math classes.

31. Prefer different test.
32. Yes. equality of evaluation.
33. No opinion! Ok either way.
34. Yes - foundational info is standard in all classes.
35. Yes. Student should have the same results even in different class environment.
36. Yes - fair to everyone.
37. In a way I do, but I think one has a better chance in passing the course by taking a test that the instructor did because one can always talk the teacher into passing them (kidding).
38. Yes, because I will know how well I did compared to the rest.
39. Yes, because very teacher should have same goals and objectives in mind when teaching course.
40. No, because some teachers may not cover as much as others.
41. Yes, because it will be the same test for everybody.
42. Sure - less stress.
43. Yes - It really doesn't matter, we are all in the same class but have diff. instructors teaching the same thing.
44. No, because all teachers are different and we've finally gotten use to you and your style.
45. Yes, because you've told us we've covered more material than the rest.
46. No. One teacher may go over one section more than another and may not stress enough on a subject.
47. Yes. It's the only fair way to do it, without have grade inflation.
48. No department test. Each teacher has certain topics which they emphasize in their own way and on regular tests this is shown.
49. No, because teachers and other students will think that you cheated if some are the same score.
50. No, because a dept test doesn't take into consideration the differences in teaching styles and what is covered in different classes.
51. No, because I am accustomed to my instructor's teaching and testing style.
52. Yes, everyone should know material covered in math 50.
53. Each teacher should make up their own final exam. Teachers may cover different subject areas others didn't. Each teacher knows their own students needs and weaknesses.
54. Yes, the final should be the same. It would require each teacher and class to cover equal material and be equally prepared.

Responses to the question: Since none of our tests have been multiple choice, are you comfortable or uncomfortable in knowing that the final exam is multiple choice?

1. I feel comfortable.
2. Comfortable because the answer might trigger how to maybe work out the problem.
3. No.
4. I am comfortable w/a final exam is multiple choice because if you know the answer you will get it right either way and if you don't know it you have a better chance of getting it right (guessing).
5. Uncomfortable cause I don't see the advantage if you still have to work out the problems.
6. Comfortable - because then I can work it out and check the answer and if I'm way off, I'll recognize it.
7. Comfortable but dissappointed that there will be no partial credit.
8. Comfortable - but we showed our work all year - that proves we know it - now all we have to do is guess - Bureaucratic - makes it easy for correcting.
9. I am uncomfortable.
10. I'm comfortable because your answer will come up the same as one in the multiple choice.
11. Uncomfortable - multiple choice tests always seem confusing to me.
12. Comfortable.
13. I am comfortable w/a multiple choice exam.
14. Comfortable - at least we'll have a choice instead of no answer at all.
15. Comfortable.
16. I am comfortable with multiple choice.
17. Comfortable
18. Yes - comfortable.
19. I'm very uncomfortable because it's not the same way we've been taking our tests.
20. Multiple guess is comfortin with me.
21. Comfortable, but hope there is scratch paper.
22. Uncomfortable (I like the possibility of having partial credit.)
23. Comfortable.
24. Uncomfortable, knowing the final is multiple choice.
25. I am comfortable that it's multiple choice because I have a chance to guess if I don't know.
26. Comfortable.
27. Comfortable.
28. I'm comfortable. I still need to know how to work the problem. With multiple choice I can confirm my work.
29. The major disadvantage for our class is no partial credit. A student could do the correct procedures but inadvertently pick the wrong answer.
30. Comfortable, you have a better chance for doing well, if you have a problem with a question.
31. Yes, because I feel nerves that I will not have room to work out the problems and that I will not get partial credit.
32. I'm not sure, I've never done an algebra test with multiple choice questions, but I think I'd like to option of getting partial credit.

33. I'm fine with the final being that way it makes it easier.
34. Multiple choice is okay because if you know how to work the problems you'll see the answer. Drawback no partial credit.
35. You should have given us a multiple choice test, so we know what to expect.
36. The multiple choice is fine - you have to work out the problems anyway so it really doesn't matter.
37. Uncomfortable, because I like at least getting partial credit.
38. I'm comfy with multiple choice because I can work problem then look for right answer.
39. It won't matter because my placement test was multiple choice to get into Math 050.
40. Un - because you can't get partial credit.
41. I agree taking multiple choice because they're easier to do.
42. No, because you won't be allowed partial credit.
43. I like it.
44. Uncomfortable because one will not be graded on the benefit of the doubt.
45. Yes - it seems a lil easier to check your answer against the ones in the multiple choice so you can recheck answer if not in the choices.
46. I like multiple choice because you can always guess.
47. Comfortable - although it has been good to get points for work shown even if the answer is incorrect.
48. No opinion! OK either way.
49. I am comfortable w/multiple choices cause it gives you time to think.
50. Multiple choice cuz one of the answers is correct, and may reduce the time spent on solving problems.
51. Uncomfortable ; there is not partial credit to a scantron.
52. Uncomfortable, because instructors have also have strong and weak teaching skills. Also we won't receive partial credit.
53. Comfortable, because if I come up with an answer, I am pretty sure it is correct if I see this answer as a choice!
54. Comfortable.
55. Comfortable.

I have found these classroom assessments to be very valuable in the following ways:

I have learned a little bit about asking questions and prefacing questions in order to get meaningful responses (first assessment).

It was helpful to know that most of the students who weren't satisfied with their mid-term grades felt that it was their responsibility to do something about improving their grades. I felt that this reflected some maturity on their part (second assessment).

On the other hand, some of my students seemed to be very teacher-dependent, as reflected in their responses on the third assessment. I'm not sure if I have unwittingly contributed to this dependency or whether the students would be dependent on their math teachers to get them through, regardless. It certainly has given me some food for thought.

My students found out, I believe, that I really was interested in what they had to say, and by the third assessment they were very interested to hear how their fellow students had responded to the questions put forth.

I do feel that the anonymous nature of the assessments allowed my students to be open and honest. I don't believe that I would have received "quality" information from some of them if they had to identify themselves when responding.

While I have always cared for my students as individual people with individual needs, I believe I am more aware of and more "tuned in" to them as a result of these assessments. My only regret is that I didn't make more time available in class to do more assessments.

SUMMARY OF 3 x 5 CARD & SURPRISE QUIZ SURVEYS

Background Information:

In order to improve retention and increase the study skills of my students, I initiated and instituted two different incentives for my students, the use of 3 x 5 cards and occasional surprise quizzes. It was my hope that these methods would encourage them to:

- 1) develop better study skills and
- 2) attend each lecture and stay the whole period.

3 x 5 Cards (index cards):

The effectiveness of the use of these cards in studying important biological information is a well known and accepted fact. Many of my students were initially reluctant to use them, however, because of the time involved in preparing the cards. To encourage them to use the cards, the students were told that, on some occasions they would be permitted to use them during quizzes. As a result, 82% of my students responded that they now use the cards and have found that they help them to be better prepared, even when they are not allowed to use them on a quiz. It is understood that these cards cannot be used during midterm or final exams.

Many of the the students who prepared and studied the cards at home did not even need them during the quiz, as they had mastered the material - a comment many of them expressed (see attached summary). As an added bonus, at the semester's end, many students told me that they found the cards so helpful, they had begun

preparing them to help them study for other classes, even though they would not be able to use them for quizzes or exams.

Surprise Quizzes:

To address the problem of keeping students in class for a biology lecture and maintaining their attention from 7:00 to 9:50 p.m., I instituted a series of five surprise quizzes during the semester. It was announced at the beginning of the semester that these quizzes would be given randomly at 9:45 p.m. and would cover information presented during that evening's lecture. The same tactic was employed in the 8:00 a.m. class, with the time of the quiz given at 8:45 a.m. The results were very encouraging. The surprise quizzes increased attendance and, consequently, retention and learning. Using the psychological principle of "positive reinforcement", the students responded well to the positive recognition of their class attendance and improved performance on quizzes.

As you can see by the attached tabulated survey forms, these measures have had very positive results.

November 16, 1990

TO: Classroom Research Project Participants

FROM: Mayde Herberg

SUBJECT: Report #3 on Classroom Assessment Experience

1. Subject/Class Assessed: Art 128, Illustration for Graphic Design
Course Description: Free-hand drawing for illustration. Includes techniques necessary in the field of illustration for graphic design. Explores book illustration, descriptive rendering, fashion drawing, product illustration and cartooning.
2. What "assessable" question was I trying to answer?
Do the students understand how to apply prismacolor to produce a drawing based solely on tonalities?
3. Technique Used: Directed paraphrasing.
4. How Feedback Was Collected:
Students were given index cards and asked to reply to the following statement: In five sentences or less, summarize what you have learned about the application of prismacolor as specified for the current problem. You may be asked to communicate this information to a classmate who was absent when this medium was introduced.

The class was given five minutes to respond. They were told not to put their names on the cards, and that their responses were not going to be graded.

5. Feedback Summary:
To analyze the responses I used the suggested categories:
 confused
 minimal
 adequate
 excellent

Examples of student responses follow typed as written:

Confused - "I have learned about layering colors for different effects. I have learned about the use of white and other opaque colors. The use of complimentary colors to emphasize the outer contour of the subject and how these colors blend for a glazed or hazy effect is also important."

Minimal - "I would have to say small, very light circular motions of the prisma pencil. The combining of color and its different compliments to achieve the closest tone value and range of color possible."

Adequate - "1) Start with light colors and keep adding darker colors; 2) It takes many layers of colors to make it have dimension and be more interesting; 3) This method takes a lot of time; 4) Use a round motion to color in more evenly."

Excellent - "1) Start with lightest colors--apply several softly applied layers; 2) Use a gentle circular motion of pencil to fill in paper; 3) Allow colors to blend optically to achieve luminous effect, i.e., "ground" of yellow followed by blue will give a sparkly green; 4) Use white to blend colours or flatten surface so a new layer can be more easily applied; 5) Avoid waxy bloom.

Fifteen students participated in this assessment -

confused	1
minimal	4
adequate	4
excellent	6
	15

6. Interpretation of Results:

After collecting the data, I told the students that I am part of a classroom research project and I briefly explained the purpose of the assessment I had just conducted. Several students said that it had been helpful to them to write down or paraphrase what they had learned about the application of prismacolor. This medium had just been introduced and is a complex and tedious material to use. The results can be very rich and sophisticated or clumsy and amateurish depending a great deal on the student's understanding of the proper application of the medium.

An immediate check of the students' comprehension and retention will save time and avoid frustration later. The results were encouraging, although one third of the class either needs further instruction/demonstration or is not able to communicate the application process in writing. There is a question in my mind on this, and I tend to think that both possibilities are probably operating.

7. Evaluation of the Effect of These Results on My Teaching:

This assessment provided a tangible means of evaluating what the students are learning. The immediate feedback is both helpful and encouraging. After reading their responses, it is easier to be open and to look at specific areas that need review. The communication with the students created by the use of these techniques really draws the class together in a very positive way.

MH:cmc

CLASSROOM RESEARCH FINAL REPORT

Dec. 10, 1990

TO: Mary Anne Anthony

FROM: Ethel Jordan

I have enjoyed using classroom research techniques in my Reading and Adult Basic Education classes at the Orange Adult Learning Center. I seemed to get the most useful responses when I used focused listing and 1- or 5-minute paper techniques, so I used those the most often. The students seemed to be able to express their feelings more easily with those approaches. The techniques were easy to manage with the 3x5 cards.

The use of the classroom research techniques has influenced my teaching in several ways. Since I usually asked for the student responses just prior to the break time in my 3-hour classes, I could quickly look through them during break and summarize the findings with the class after break. In so doing, we not only did a quick review, but I was able to catch misunderstandings before the students had completely finished the assigned work. I used the assessment information later on when planning the next lesson. It helped me remember the areas of confusion and include them in the review, making it more specific.

Changes occurred both for my students and for me as a result of using classroom research. Perhaps the most powerful one for my students was the enhanced feeling of freedom to express opinions. The idea of anonymously reporting about learning was a new one to most of them. I also think that they have a deeper understanding of my concern for their success.

As the instructor, I felt that the classroom research techniques gave me the capability to respond more quickly to my students' needs. Since I work in an open-entry/open exit program, I don't always see the same students. Classroom research helped me be more effective in clearing up confusion during the same class period rather than after assignments had been turned in. I plan to continue using classroom research techniques in my classroom.

After a semester of trying a variety of classroom research techniques in my classes, I have a much clearer picture of how classroom research can improve instruction. It can assist me in my daily lessons, my interactions with colleagues, and my plans for next semester.

My work this semester was Cross-Angelo, and at first I followed suggestions from the book somewhat closely using lots of 3x5 cards and making frequent lists. For example, in my "Women in Literature" class I introduced a new reading assignment by listing first what the students already knew about the author or the work. Sometimes the list of facts was fairly detailed and complete, such as when we studied Alice Walker, so I knew I didn't need to spend much time on background information. With other authors, such as Sappho, I found that students totally unaware of her or her work. Thus I learned that I needed to budget more time than I intended when we studied Sappho and less time than I planned when we studied Alice Walker. Sometimes after discussing a short story or poem, I used the 3x5 cards to find out which parts were clear or muddy. These cards revealed frequent misconceptions or misunderstandings, and we were able to discuss them before going on the next story. After a few weeks, I didn't need my Cross Angelo text as such a crutch and began researching more frequently and more spontaneously.

But the Cross Angelo text was only half my source of research, the rest being ideas gleaned from my colleagues at our meetings and in their reports. Their reports on their classroom research not only gave me some good examples to follow, but I was also able to generate new ideas by hearing about their experiences. In addition, receiving written copies of the reports enabled me to remember the step-by-step details, and in some cases suggested pitfalls

to avoid. Moreover, it was reassuring to see my peers going through what I was experiencing i.e. some successes, some insights, but no panacea. We all seem to be "searching" and re-searching.

Some conclusions are hard to measure or prove. Nevertheless, I had the feeling that my classroom research was less effective in my fifty minute classes than in my longer ones. For example, ^{if} I taught a concept and used the last five minutes to check for understanding, it was two days before the students got the feedback, and they were naturally less interested. But if I taught a concept, did classroom research, ^{if} tallied the results, and then discussed the findings in the fifty minute period, I had to shorten the already brief time allocated for the instruction. By contrast, classroom research went very smoothly in my three hour night class. I taught the lesson, did the research, and dismissed the class for break. When they returned, I had the results tallied and on the board, ready for discussion so that we could analyze the results together before going on to the rest of the lesson planned for that evening. But one of the first lessons I learned as a beginning teacher was the need to develop a sense of timing. I'll learn how to time the research in fifty minute classes. And I'll continue to learn what my students like best-least, what's clearest-muddiest, and undoubtedly many surprising insights as I engage in classroom research next semester.

Classroom Research: Cross-Angelo Classroom Assessment

Purpose: To motivate students to study and to increase the student retention rate

Class: Chemistry 119 (Fundamentals-General and Organic)

Method: Students were asked to answer questions anonymously during the class.

Questions:

Week 1

1. Why are you taking this class?
 - a. for the major---4
 - b. for the preparation for other chem. courses---1
 - c. for the general information---12
2. What is your background with respect to this class?
 - a. high school chem.---7
 - b. no chem. class---10
3. What are your worries and concerns for this class?
 - a. too much math---2
 - b. too much work load---6
 - c. too much memorization requirement---1
 - d. too difficult to understand---4

Week 2

1. Should there be a lunch break (15 or 30 min.) between the lec. and the lab?
 - a. yes---9
 - b. no---11
2. What do you remember from the last week's lectures?
 - a. scientific notation, significant figures, what chemistry is about---19
 - b. not much---1
 - c. rules are confusing---2

Week 3

1. What have you learned from the video tape?
 - a. halogens, noble gases, metals and nonmetals alkali metals---13
 - b. family of elements---1

Week 4

1. What is the key point of today's lecture?
 - a. intensity and effects of radiation--3
 - b. nuclear reactions and radiation---10
2. Please give comments on the lectures.
 - a. interesting, well taught, easy to follow---7
 - b. confusing and hard to understand---5
 - c. decrease math, highlight the key points---3
3. Please comment on your progress so far.
 - a. satisfied---7
 - b. needs improvement---7

Week 6

1. What is the muddiest point of chapter 3?
 - a. nomenclature---3
 - b. polar and nonpolar compounds---3
 - c. shapes of molecules---5
2. What is the clearest point of chapter 3?
 - a. ionic and covalent bonding---5
 - b. Lewis structure---4
 - c. balancing equation---2
3. How many hours have you studied for the last exam?
 - a. 5 hours---5
 - b. 6-8 hours---4
 - c. 5-10 hours per week---2
 - d. less than 2 hours---2

Week 7

1. Rate(1-5; 5-very clear) your understanding of the following topics from chapter 4.

	1	2	3	4	5
a. balancing equation	4	0	1	2	8
b. moles	1	3	4	3	4
c. formula weight	1	1	4	4	5
d. weight relationship	7	3	4	0	1
e. % yield	6	3	2	2	2

Week 8

1. Explain the drawings on the gas laws.
 - a. Boyle's Law---12 correct; 2 incorrect
 - b. Charles's Law---12 correct; 2 incorrect
 - c. combined gas law---no correct response

Week 9

1. Which topics should be reviewed for the exam II?
 - a. Le Chatelier's principle
 - b. Henderson-Hasselbach equation
 - c. surface tension
 - d. vapor pressure
 - e. London dispersion force
 - f. combined gas law
 - g. buffer solution

Week 12

1. Rate your understanding of the following topics from chapter 7 (1-3; 3-very clear)

	1	2	3
energy diagram	2	7	3
activation energy	1	8	2
kinetics	2	7	2
equilibrium	4	5	2
equilibrium constant	5	4	2

2. Should we change the exam III date and cover up to chapter 8?
 - a. yes---9
 - b. no---0

Week 13

1. What do you remember from your reading of chapter 10?
 - a. organic chemistry-study of carbon compounds---7
 - b. molecular and structural formula, isomers---8
 - c. bonding and geometry of organic compounds---5
 - d. differences between organic and inorganic compounds---2

Week 14

1. What is the Markovnikov's rule?

2 correct responses

Week 15 (Evaluation Questions)

During this semester, you were often asked to respond to questions anonymously. Have those questions

1. helped you evaluate your understanding of the material?

1	2	3	4	5	5 = agree
					1 = disagree
3	1	0	5	6	

2. helped you retain the material?

1	2	3	4	5
5	1	5	3	1

3. helped you understand the material?

1	2	3	4	5
5	0	5	3	2

Comment-This assessment technique was very helpful for me to identify the confusing topics for the students. I plan to apply this technique again in my future classes.

CLASSROOM RESEARCH REPORT

JACQUE O'LEA

Participation in the Rancho Santiago College Classroom Research Project has provided an opportunity for growth in my classroom. This growth has benefited me in rather significant ways. Not only has it brought with it an awareness for the necessity to constantly evaluate what and how learning occurs, but has also resulted in a renewed joy in watching that same learning process. Besides the benefits to me, I believe that it has also contributed to the fact that my students seem to be accepting a greater responsibility for their role in this learning process.

My initial attempt at classroom research was rather clumsy and not particularly natural. Surprisingly, however, the results were quite positive. I asked the students to identify the most important thing they had learned, and was pleased to see that they responded as I had hoped they would. This rather fortunate beginning probably generated the enthusiasm which followed. My students began to report more and more frequently on what they had learned, how they felt they learned best, and what they wanted to study more. I, in turn, began to use the techniques I was learning in the Classroom Research Project to monitor their progress almost constantly. Because the techniques are non-threatening (for teacher and student alike), and because they are fast and easy to use, it became an on-going process which seemed to bring about an increased awareness of the necessity to evaluate methods, materials, and learning styles.

Creating the optimum learning environment is essential in any classroom, but I believe it is especially essential when dealing with the population often found in the Continuing Education ESL classroom. The background of the students is extremely varied, but quite often includes many

"at-risk" students whose previous academic experience is either quite limited or has been negative. These students seem to blossom when they are given the opportunity to provide and receive immediate feedback. I stated earlier that classroom research techniques are non-threatening. This is true only if the instructor believes that they are non-threatening and is willing to attempt to find more effective teaching strategies. In order to be successful, they must influence our classroom behavior. There must be an openness and willingness to accept "criticism" of teaching strategies which we may have used for years and from which it is sometimes difficult to depart. Because each student and each class has its unique personality, these research techniques generate new strategies or help us to improve others so that it becomes difficult to tell who is learning more - teacher or student! That's the joy!

CO-OPERATIVE LEARNING

by

William Blake - English

Karen Dennis - ESL

Bonita Jaros - English

Priscilla McCarty - Human Development

Cheryl Ooten - Mathematics (2)

Grace Tanaka - ESL

William Blake
May 15, 1991

ASSESSMENT OF CRITIQUING GROUPS

Two classes of N61 (remedial English) and two of 101 (transfer) were polled using these questions:

.....
Did the 3-person critiquing groups function better or worse as the semester went on? Check one:

Worse____ Same____ Better____

Please give some honest comments about your critiquing group:

[Large space for comments]
.....

Next Fall, our English N61 and 101 courses will increase from 3 units to 4 units (4 class hours). The frequency, composition, and procedures of the critiquing group will change with one additional class hour. I needed to assess the current status of critiquing groups in order to gauge their effectiveness and to create procedures for next semester's 4 hour classes. Also, I wanted to compare the relative effectiveness of groups in N61 classes and 101 classes. Are the supposedly more "advanced" 101 students making better use of the groups? Are the purportedly less capable N61 students having special difficulties?

I had four cooperative education issues in mind while constructing this assessment:

1. Did the critiquing groups get better or worse for students as the semester advanced?
2. What are the effects of early semester drops, or inconsistent attendance?
3. What specifically do students recommend about better procedures?
4. Do N61 and 101 students function in a similar fashion?

ISSUE 1: Did the groups do better critiquing as the semester went on?

	<u>N61 students</u>	<u>101 students</u>	Total
Worse	3	3	6
The Same	11	11	22
Better	24	12	36
	<u>38</u>	<u>26</u>	<u>64</u>

**ISSUE 2: What are the effects of early semester drops or inconsistent attendance?
Do these disruptions severely damage group morale or functioning?**

Seven N61 students (of 38) complained about inconsistent attendance. Students were late or absent and thus critiquing suffered. Only one of 26 101 students complained about this matter. Comments of N61 students were highly emotional. With the additional hour next semester, I can try four members per group. An absence won't be as serious if three members are still present.

ISSUE 3: What did members think about the groups? What do they recommend?

<u>N61 students</u>		<u>101 students</u>
Mainly Positive	24	15
Neutral, Or Both Good And Bad	6	6
Mainly Negative	8	5
	38	26

Positive comments were quite affirmative:

In the beginning we were intimidated by each other, but as we were able to get to know each other and were concerned with Passing and receiving good grades, we began to get serious and honest with each other. I know without these groups my grades wouldn't have been as high as they were. Great idea. P.S. I think I was lucky to get in a good group with good writers.

Negative comments were also powerful:

The guys never gave me any negative feedback. They always said "This is good." Plus, I couldn't stand one of the guys but had to live with it anyways.

Student recommendations are these:

1. I think each group needs an assertive leader.
2. It takes a much longer time [than 20 minutes per individual critique] to do a decent job.
3. Three in a group is crucial. 2 is no good.
4. Suggest that the instructor perform a classroom assessment such as this one after the first half of the session [course] so that he may get an opportunity to change the groups if needed.
5. Need more practice in critiquing.
6. I would have felt better about critiquing if there was a review of my critiques by Mr. Blake.
7. Stay with the same group all semester long.
8. Since you have 4 hours in the Fall, you might try some beginning of the semester training of your critique groups.
9. Changing members added new life.
10. I wish that we had more time together. Maybe [my] group could be bigger.
11. We still need a little bit more time for the critique.
12. Sometimes we need more time.
13. Students should be able to chose their own groups if they want.

Student responses indicate a future direction for procedures:

- A. Four members per group to guarantee sufficient critiquers.
- B. A fifth and tenth week assessment in which members identify themselves and state frankly what they think about themselves and other group members. This assessment would be rather brutal, yet its the quintessential fact of most work and relationships. This is the ultimate accountability that we all preach and avoid. Certainly, the core problem of poor student critiquing is not one of ability but one of attitude. Almost any student can apply a clearly stated concept *if motivated*.
- C. Additional training in critiquing, probably using overhead transparencies. I thought that I'd done a good job here, especially with very detailed hi-liting instructions and specific critiquing questions relating to material already studied and discussed. However, still more time should be spent on student training in critiquing.

ISSUE 4: Do N61 and 101 students significantly differ in critiquing skills or ability?

No evidence exists of any major difference. N61 students did suffer more from members dropping out or from group member changes. Yet N61 students reported greater value of critiquing as the semester progressed. N61 students also reported a more positive attitude toward groups as a whole. If student responses are any criterion, critiquing groups are definately appropriate for the "remedial" level of English student.

CONCLUSION:

1. My initial training by Bonita Jaros was essential.
2. The group selection process must be improved.
3. Group must be four in number.
4. Regular and frank assessment of members' value to other members must be done.
5. Increased early semester training in critiquing is critical.
6. A full "tribal" cooperative education application is impossible due to RSC being a commuter college, students having varied schedules, and a minority being incompetent or dilatory.
7. Two-thirds of students stated that they enjoyed the groups and profited from them. I regard this figure as remarkable. The four courses cited are early evening and night courses. Students work all day and come to school tired. Ethnic students with poor English skills are a significant minority of both N61 and even 101 classes. Student values often do not include strict attendance and attention to homework. If I can raise this 66% figure to 85% next semester, I'll be satisfied.

December 10, 1990

Karen Dennis
Final Report for
Classroom Research
Collaborative Learning

During the 1990 fall semester, I had my Intermediate 3 class, the most advanced section in the noncredit ESL program, use collaborative learning in a writing assignment. The class is open entry/open exit, so new students may enter any time during the activity and must be worked into the group.

My first classroom research project began after a presentation by the librarian on the Newhope Library. Students listened, took notes, brainstormed about what they had heard, and finally wrote a paragraph on "What I Learned about the Newhope Library." The second project had the students assess group work, and most were favorable because of the ideas that were shared. There were some criticisms that people were not prepared and spoke their native languages in the small groups. Because of these comments, I required more interaction in my final project, and I made sure that two separate languages were represented in the small groups.

My last project in collaborative learning again centered around a writing activity. Students brainstormed about what they were thankful for. We used a cluster pattern on the board for a group effort concerning things or people that we were thankful for. We then practiced several topic sentences for the most popular answers found in the cluster. We reviewed the meaning of a topic sentence. I wrote on the board a model of a paragraph, and I highlighted the topic sentence by underlining it. After that, students chose a topic sentence from the board or created one of their own. In the next step, students had to write about the things or people they were thankful for.

When the students finished the writing in class, I put them in random groups with at least two different languages in a group. The following is the assignment:

- * read each other's paragraph
- * sign your name that you read it. Three names are required. Do not write anything else on the paper.
- * talk to the person about the paragraph and ask two or three questions about it

After the lively discussion that followed in the groups, the students had to rewrite their paragraphs, add two new details, and underline these details in their paragraphs. They had to staple their brainstorming cluster, the first

draft with the three signatures, and the rewritten paragraph together and hand them in.

To see what stage of the writing activity that students liked the best, I had them do an assessment. They had to write short answers to these three questions on 3x5 cards. I think it is interesting that the definition of a topic sentence wasn't answered well by most students, and the last question again favored collaborative learning.

1. What is a topic sentence?
2. What's the most difficult part of writing for you?
3. What did you like about writing the paragraph?

I collected the answers and read them aloud to the class. There were twenty students in class, fifteen responded, four had been absent and hadn't finished the assignment in time to do the assessment, and one simply never turned in the card.

Question # 1 What is a topic sentence?

I forgot

I don't remember

the main idea and key word

Topic sentence is a sentence that has a topic and key words.

Topic sentence has a leader of sentence

She has to go now. (I think she thought I said to give an example of a sentence.)

Something we want to talk about

key a word sentence together (?)

I don't know

main idea

main idea

main idea

The topic sentence is a sentence that has the main idea or the information that you are going to talk about.

Is the main idea.

-

Question # 2 What is the most difficult part of writing for you?

difficult to express the idea exactly how I want

to put in order the words (This is a telling comment.)

getting ideas

using words exactly

history (I think this means writing about the history of the U.S.)

express by myself very well

vocabulary

all the ones (meaning everything)

the most topic sentence

getting ideas

put the words together
write letters
getting ideas and details
to start and grammar
to make long sentences

Question # 3 What did you like best about writing the
"Thankful" paragraph?

- * I liked that my 3 classmates read what I wrote.
- * Read the paragraphs of other classmates was interesting.
I liked to write twice because I put more detail when I wrote the second time.
I like the rewriting the Thanksgiving paragraph.
- * I liked to share with many people.
- * I like work 3 people together.
expressing about the main idea
- * get more information to the other person
-
- * I like to write (work) 2 or 3 people, we could get ideas
- * I like to work in group
I liked the topic sentence.
- * I didn't work in group, but I wish I did because I think it is better.
I like about the Thankful paragraph because it give me where Thanksgiving came from, and why they celebrate for.
- * I liked that three students read it and I like that rewrote it.

From the nine positive responses on a collaborative effort on question three, I could predict the next writing assignment would be easier, and it was. The use of collaborative groups for reading and discussion on the first draft helped the final product in all but one case. In this situation, the student tried to use all the suggestions from another student and became sidetracked, and the suggestions just weren't as good as the original paper.

Collaborative learning is wonderful because it works, creates a feeling of good will in the class, involves the students in the learning process. The students like it as much as I do.

Thanks for the opportunity to participate. I enjoyed collaborating with fellow instructors on collaborative learning!

AN OVERVIEW OF MY EXPERIENCE WITH CLASSROOM ASSESSMENT

Collaborative Learning - Fall 1990

Bonita Jaros

I chose to use a formalized assessment mechanism in collaborative (i.e. cooperative) learning, because I have been using cooperative learning extensively since Fall, 1987. I have been trained by Spenser Kagan and Carole Cooper, and I believe that cooperative learning is not just an ad hoc mixture of groups that do tasks, but it is a method of acquiring, assessing, assimilating and retaining information that is unique. It also crosses all cultural and social barriers opening up learning to all who participate. In addition, used properly, a cooperative learning classroom will employ a good balance of methodologies including lecture, modeling, group tasks, group projects and individual work.

In my assessments, I used my ESL 110 class. This class is a prerequisite to English 101, Freshman Composition. It is designed to deal with rhetorical modes; however, this is not an easy task since there are still many lingering sentence-level and idiomatic usage problems. Because of the dual function of the class, it is important to enmesh the two tracks as a unified whole while addressing individual needs. In order to do this, constant monitoring prevents students from losing sight of both purposes. They must learn to create, revise and edit. This is a formidable task which I have found is best done in a cooperative mode.

In my assessments, I wanted to know if the students felt the style of cooperative learning was helpful to them. I also wanted to know if the balance of methodologies i.e., group tasks, lecture, modeling, individual work was appropriate. In addition, I wanted to know if they felt prepared to do in-class writings with regard to idea generation, organization, and editing for grammatical errors. I found that direct questions worked best since this particular class has been very honest and likes to offer feedback.

In the responses I learned that the cooperative mode was excellent for them, but that the balance of methodologies was a bit heavy in group tasks and did not have enough modeling. This was very easy to rectify. Moreover, the great majority of the students of this class felt that they were well prepared to do in-class writings and they received the grades they expected.

As a result, I will continue to use cooperative learning in all my classes. I will decrease the use of group tasks and heavily monitor the classes. Since each group is different, the balance of methodologies might vary from group to group, so I will not assume that what I discovered in one group will be effective in another. I will use several different types of assessment techniques as well depending on the reactions of the class. I feel continual assessment is indispensable.

I hope to remain a part of this project. I would like to see how learning logs can be used as a daily assessment tool. Thank you for the opportunity to participate.

DATE: January 13, 1991

TO: Classroom Research Consortium Participants

FROM: Priscilla McCarty, Human Development Instructor

SUBJECT: Final Summary of Collaborative Learning Project (Fall 1990)

Six different types of collaborative small group activities were used in Human Development 211, Programs for Young Children, during the fall semester (see attached handouts for a more detailed description of each activity). These activities included:

- 1) pairing of students to interview and introduced each other to the class and to decide together the three most important criteria for a quality program for young children (an expansion of a classroom research technique used during the Spring 1990 semester).
- 2) dividing the students into six small groups so that each group could brainstorm ways to implement six developmentally appropriate teaching practices into a classroom of young children and present their ideas to the class. (They "taught" their specific practice to the class.)
- 3) giving each small group the same case study description of a child so that the group could plan one of the three steps in a self concept building program for the child to present to the class.
- 4) developing as a small group an excellent definition of discipline that could be used to explain the meaning of the term, discipline, to a new teacher or a parent of a young child and deciding upon the three most important guidelines for implementing effective discipline with young children. (This was a repeat of a classroom research technique used during the Spring 1990 semester.)
- 5) developing as a group teaching team six appropriate limits for a specific age group of children in various aspects of the classroom for young children.
- 6) planning and presenting a skit to the class in which they used the four-step problem solving process, (assuming the roles of young children and a teacher) to help two or three young children to work out a problem which has occurred at school.

The students were also given the option of completing a portion of their take-home final dealing with planning a parent-teacher conference as a small group or as an individual. I have attached a copy of the assignment even though no students chose to complete the assignment as part of a small group.

All of the concepts used in the group collaborative activities were first presented to the class in a more traditional lecture-discussion format. The group collaborative activities were used to help the students to see how they could apply the concepts or to give them the opportunity to try new techniques. Classroom research techniques were used to collect data about how the students felt about the group collaborative activities and how effective they felt the activities were in helping them to learn the material. (See the three reports turned in this semester.)

The feedback from the students strongly suggests that using group collaborative activities to help students to master concepts is very effective. The students felt that these activities were a good use of classroom time, and everyone seemed to learn from and enjoy the group collaborative activities. The data also seems to support the existence of a variety of learning styles within this classroom of students. Some students continued to prefer the lecture-discussion format, but also felt they learned from the collaborative activities as well. Other students definitely preferred the collaborative activities and felt they learned best via these activities, but also felt they learned from the lecture-discussion format. A third group of students seemed to want a combination of these formats. An examination of test questions related to the concepts presented via group collaborative activities seems to suggest that more students mastered these concepts than was true in earlier semesters when group collaborative activities were not used.

I have always hesitated to use group collaborative activities in my classes, because I had had some bad experiences in classes with small group activities as an undergraduate student. I had several teachers who turned over large blocks of classroom time to student presentations and unguided small group discussions. I found it to be a waste of my time. But because I definitely believe in the existence of a variety of learning styles, I wanted to try group collaborative activities. I found that when I carefully planned these activities with clear guidelines and specific products to be created by the group, these activities are wonderful. They really seem to help some of the students learn much more effectively than my carefully constructed lecture-discussions. I feel that a much higher percentage of my students mastered these key concepts while beginning to feel more confident in their abilities as active learners. Using a variety of formats and especially including formats in which the students are more actively involved also seems to make a three-hour, once-a-week class a more viable way of teaching a course. I have already developed two additional activities to use during the spring semester, and I will continue to include all of the activities I used during the fall. These projects will have a long-term and significant impact upon my teaching; and I hope, upon the successful learning of my students.

DATE: December 10, 1990

TO: Mary Anne Anthony

From: Cheryl Ooten

SUBJECT: Final Report for Collaborative Learning Project

1. Class Involved with the Project:

The class that I chose to use for my collaborative Learning Project was a small Math 160 trigonometry class. After the first 3 weeks of classes, the class settled to a size of 12 students.

2. Summary of Project Activities:

I chose to use workshops weekly within the classroom based on the Uri Treisman U.C. Berkeley model. The classroom format in the beginning was 3 days of lecture and 1 day of workshop. On the workshop day, I gave the students a worksheet with challenging problems covering the topics we had been working on. (These worksheets were prepared by myself or Jane Francis.) Students worked on these worksheets in groups of 4 within the classroom. (Review worksheets were given the day before each exam.) I served as a facilitator to get students to ask each other questions and compare answers rather than asking me. I circulated in the classroom clarifying group misunderstandings rather than individual student misunderstandings.

After about a month and a half, the class formed two workshop groups, instead of three, and each student knew the other 11 students within the classroom by name. The lectures sometimes became more group work with students working together in teams at the blackboard. The entire graphing unit was completed as a group activity. (Details of the graphing unit and blackboard work are in my project reports #2 and #3. The worksheets that I used are attached.)

Throughout the semester, I used Cross-Angelo techniques to check on the student's opinions about the group work. They seemed very enthusiastic about working together recognizing both the benefits and the liabilities if it were done too much.

3. Observed Changes in Students and Teacher:

At the end of this semester, the classroom atmosphere seems to me to be one of more cooperation and interest in trigonometry than any small class I have had before. The students seem to be integrating the material better because of their activity within the classroom. They do not just take notes and do homework. They discuss the problems with each other and correct themselves. They have no hesitation about working

problems publicly on the blackboard. The atmosphere is one of acceptance rather than criticism or fear. One major concern for me has been student absences, but I believe these have been the result of outside jobs, illness, and sports activities rather than disinterest in the class.

For me, the workshops, group work, and Cross-Angelo assessments have made the course one of the most satisfying teaching experiences I have had. I know my students' abilities better than if I had only seen homework and tests. I have seen them discuss and work their problems publicly and have often been able to assess daily what they know and don't know. I believe that I have done almost everything that I know possible to teach them and to support their learning. This is my second semester using workshops within the classroom. I expect to continue using them whenever possible because I have seen the benefits so clearly. I do not think the workshops keep any more students in the course but I do believe that the students who finish definitely know more than if they did not have the workshop experience. I also expect that I will continue using Cross-Angelo assessments because the results are so interesting to me and seem to be to the students.

Classroom Research Project
Spring, 1991
Cheryl Ooten, Mathematics Instructor

This semester was my third semester implementing cooperative learning within my classroom. I focused specifically on my trigonometry class of 25 students.

The questions that I explored were:

How could I get students to work cooperatively in their groups instead of sitting physically together but working separately?

How could I get students comfortable working actively in the classroom with mathematics?

The classroom format included:

1. Teacher lectures at the overhead projector
2. Student workshops (at least one meeting a week) focusing together on a teacher prepared worksheet
3. Students working in groups at the blackboard
4. Classroom assessments done throughout the semester to obtain student feedback on classroom procedure, student learning, and student attitudes. (Some of these assessments are attached.)

WORKSHOPS:

1. For the third semester, I continued weekly workshops in which students worked together in groups on a worksheet prepared by me with challenging problems integrating the course content. My attempts are to model the student facilitated workshops begun by Uri Treisman at U C Berkeley. My workshops are teacher facilitated.

In previous semesters, I allowed students to pick their groups and sometimes I picked their groups, but the groups remained constant throughout the semester. This semester I decided to merely number the students from 1 to 6 on workshop days and form different groups each time. I thought that this would solve the problem of absenteeism ruining a group and would promote some kind of whole class unity as the students got to know everyone else in the classroom. This method of forming groups did solve the absenteeism problem, but it did not promote unity. In fact, student surveys (See attached) showed that the students preferred blackboard work and listening to the teacher over groups. Their comments reflected that they were not getting to know each other and that, in fact, some groups spoke Vietnamese isolating those who did not speak that language. Because I believe that groups can work well to promote student learning and that I just wasn't doing it "right", I gave another assessment, saying, "Working cooperatively in groups has been researched and shown to be a very positive

way for students to learn better. How can we improve our groups?" Their comments supported the idea of more stable groups with a mixture of ethnic groups. Consequently, for the last two weeks I formed stable groups mixing intellectual abilities and ethnic groups. These groups met four class meetings to review for the last chapter test and for the final exam. I assigned each group a permanent location in the classroom in front of a blackboard. This way classroom sessions could combine the blackboard work as a group (which they seemed enthusiastic about) and group work on a problem set written for each meeting.

The results of this new group configuration and combining group seatwork and blackboard work produced a much more active and involved atmosphere in the classroom. The results of the student assessment (See attached.) supported my assessment.

2. Also, in order to attempt to get the students to work more cooperatively and to be responsible for their own learning in the groups, I prepared a Graphing Unit (See the attached Graphing Worksheets) that would require cooperation with the rest of the group in order to do the work.

One day was spent working with the graphs of the six basic trigonometric functions. Then for three consecutive days, the students began each class in one of four groups of 6 or 7 students. The task was to do two graphs of trigonometric functions (one basic curve and one with a change) and to check with each other to be certain that they were correct. Then the students were dispersed into groups of 4 students. Each student in the second groups had been in a different initial group. The new task was to discover what graphs the other 3 students had graphed and to draw some conclusions about the meaning of a number placed in a certain position in an equation. The concepts of amplitude, period, rotation, and horizontal shift were addressed. Since each student had initially graphed a different function, h/she alone in the second group was responsible for that graph.

My hope was that these tasks would help the students see the patterns in trigonometric graphing more easily because they discussed and compared them with the other student's work. I believe that they did learn them better than if they had worked individually and I had demonstrated the concepts. I also hoped that these tasks would make each student more responsible during group work. I believe there was some success in this area also because two students who previously had been distracters in class settled in a bit. These activities did not appear to promote any more discussion in the regular weekly workshops. I think that this is because there was no consistency from week to week and the students did not get to know each other.

BLACKBOARD WORK:

One of the best ways for me to get the students working cooperatively is to send the entire class to the blackboard to work in groups. This can be difficult with a large class, but with the 25 students in this class crowding together at the board, they had to work cooperatively just to get some work up there and to share erasers! During these times I would put a problem on the overhead projector and then circulate giving them recommendations such as, "If your group is stuck, talk to another group." or "Compare with that group over there. They seem to disagree with you." I could correct notation and misunderstandings. I could also assess quickly the understanding of concepts. As a class, we could also compare different solutions to the same problem. I could give public praise to work habits I wanted other students to emulate.

When we formed the stable groups during the last two weeks, the blackboard work took on an even more cooperative demeanor. The groups stood around discussing what they had done and comparing it with the other groups. They began to consult with each other more.

CLASSROOM ASSESSMENTS:

Classroom assessments were done by handing out a blank index card to each student or asking them to use a piece of blank paper. I then asked them from one to three questions - often having these questions on an overhead transparency. The students answered the question/s and put them in a large envelope that was labeled "Math 160 Classroom Research". Several of the surveys that were most meaningful to me this semester are included.

SUMMARY:

I continue to believe that working together actively in the classroom (at least part of the time) will promote more integrated learning. I feel that I am getting better at facilitating this atmosphere and I also believe that it is a difficult thing to do. It is not only teacher dependent, but student dependent. My part is to provide meaningful tasks for the students and to attempt to provide a nonthreatening environment for student struggles with these tasks.

This trigonometry class came alive working together at the blackboard and working together in groups with mixed intellectual and ethnic characteristics. They did not do well when groups were changed every time.

In future semesters, I will continue to plan workshops in the classroom. I will seldom form groups by counting off. I will either form groups by handpicking them myself or I will allow the students to pick their own. When physically possible, I will include blackboard work with groups. I will also continue to use the index cards to obtain student feedback.

CLASSROOM RESEARCH FINAL REPORT

Cooperative Learning

Grace Tanaka

My cooperative learning groups were originally designed to supplement the individualized computer reading program being utilized by my ESL Intermediate 3 class. Through the use of the cooperative groups, I attempted to tap into the students' rich cultural heritage and diverse backgrounds, and give the students an opportunity to use and practice oral communication skills. The cooperative learning group activities consisted of different types of vocabulary development and comprehension exercises. Each student was responsible for completion of all the exercises assigned with the different groups responsible for presenting the correct answers (answer key) for the whole group. This put the burden of responsibility for accuracy on the selected group.

Much language and oral communication were generated and good cohesive group feelings seemed to have developed among students in their groups, thus I expanded the tasks assigned to be more inclusive. Cooperative groups met for oral practice, review and clarification of structure and concepts

I have observed that there seems to have developed a stronger bonding among students within their groups. Usually students sit in the same seats by choice and only get to network and interact with their immediate neighbors, but with the cooperative groups, students seemed to have bonded with a greater mix of classmates. This has resulted in a very close knit class. Although this is an open/entry open/exit class, the persistence rate has been very high. Thirty five of the original forty five students are still attending class. This persistence rate could be because of the bonding that has occurred. Work in the cooperative groups involves a lot of peer coaching: students helping students and this cooperative effort has helped raise self-esteem for both the tutor and the tutored.

One of the nine groups originally had problems with one group member who was a non-contributing member of that group. At the beginning of the semester, I know that that group was very

disgruntled with his behavior and efforts. This student was kicked out of another ESL class because of his inappropriate behavior, but he is still in our class today. He is better accepted, and he works more cooperatively in his group. I cannot say whether the cooperative group bonding, or the fact that he had earlier been kicked out of another ESL class was responsible for the change in his behavior, but this change is welcomed.

I have continued to use other Cross/Angelo assessment techniques such as the focused listing, one minute paper and memory matrices which have all helped to improve the teaching/learning environment in my classroom. Using these quick anonymous assessment techniques has greatly enhanced open communication between the students and myself. With ongoing assessment and communication, teaching becomes more focused, and the classroom atmosphere is improved for maximum learning.

The last Cross/Angelo technique used just before writing this paper was to assess the students' reaction to the use of the classroom assessment techniques that were most often used during the year (the focused listing and the one minute paper used for concept and grammar structure clarification) I wrote on the board:

I like the use of assessment techniques because....

I don't like the use of assessment techniques because....

The responses were unanimous in favor of using assessment techniques. All 32 students said they liked the use of the techniques. Some of the reasons:

with this we can show you how much we've learned about the lesson and
 what we need to study harder
 its the manner that I know how much I have learned
 we may know the amount that we are learning and which do we need to
 study
 we can learn more and the motivation improve when you do work us
 together (Is this student referring to group work?)
 I can review all of the lesson
 is good practice for me
 that way we learn more and we use our brain sometime we forget we have
 one
 it helps me understand clearly

they help me to find my mistakes
to learn more English and to remember the lesson that teacher taught
it is a short test about the teacher teach us
that's the way we can now how much we've been to advance
is the perfect way that a teacher could know when the students are getting
more trouble
you know what I need to learn and when I need more help
is a way of think in English and know the level of English that I have

It is evident that the students themselves see the benefit of the use of Cross/Angelo assessment techniques as a tool in enhancing their mastery of concepts and for clarification purposes. It helps students become aware of themselves as learners. They begin to monitor their own learning and become more active participants in the learning process.

The concept of permanent cooperative learning groups functioning effectively in an open/entry open/exit ESL class was inconceivable to me before I embarked on this project. I am a believer! Permanent grouping does work and does enhance the teaching/learning environment. I have used cooperative learning activities before, but never attempted to form permanent groups. I need to thank Bonita Jaros for her staff development workshop on collaborative learning, and her conviction that permanent grouping can work. I have been talking to colleagues in CED about the merits of permanent grouping for cooperative learning activities.

LEARNING LOGS

by

Sharon Allen - ESL

Caroline Baca-Frye - Counseling

Roseann Cacciola - English

Bonita Jaros - English

Elizabeth Macey - English

Gregory Pezzetti - Psychology

Classroom Research Summary Report: Learning Logs

Sherry Allen

December 10, 1990

What I did:

This fall semester I have used learning logs in my ESL Intermediate III class. At the beginning of the semester I attempted to set up fairly formal logs. I had students write what we had done in class on the left of the page and their response to it on the right. They could ask questions, comment, take notes, etc. I found them to be struggling and generally answering with short, simplistic comments. After our first Classroom Research meeting in October, I tried changing the way I structured the activity. Instead of dividing the paper and having students write what had happened and their response, I instead made it more flexible and asked them to write about something they had heard or read or thought while they were in class. The last fifteen minutes of class were devoted to this. I made the assignment randomly during October and on a daily basis in December. I often used the response cards to get reactions to the journals from students.

Evaluation:of Learning Log Project in my classroom:

Last week after three consecutive weeks of writing daily, I asked students to do a five minute paper on the pros and cons of journals. I was pleasantly surprised at their responses. I would have anticipated about sixty percent positive responses and 20% negative with 20% not answering or being neutral. In reality, 19 students responded and eighteen asked that we continue the process. Several students asked for more structure and three asked that we write three or four days a week rather than every day.

Sample comments from students' papers:

"It is very good one can learn more English because every day one tries to think in English."

"I'd rather write in the journal one time a week because writing still my problem. I can't handle it. So if I write in it every day it will make me frustrated." (negative comment)

"I want you check grammar"

Conclusions:

I will use journals again next semester. I think I will try three days a week to begin and then reevaluate. Also, I will try assigning a topic each day, but then saying, "or write about any thing you want to." I also will try to devise a regular collection process, maybe by table, so that I see each journal and comment more often. Hopefully, I will see each journal once a week. I may also give the students the option of marking one entry each week for me to correct grammatically. The project has been more interesting than I expected. The students' entries have helped me to focus lessons on acculturation as well as specific grammatical points of confusion or interest. Originally, I wondered if taking this much time out of a class period would be worthwhile. In an ESL class, asking students to write for a shorter period of time would be too frustrating and limiting. Therefore, the fifteen minute time period seems a minimum. After this semester, however, I am convinced that having students write frequently is worth the class time spent on it.

Classroom Research
Learning Logs

Learning Logs are records kept by students. The Logs may be used to get feedback on what students have learned or identify areas in the class that are providing difficulty for the students. It also allows the instructor the opportunity to keep up with student progress and also to interact through notations that are made on student's logs in response to their comments.

A recent positive use of the Learning Log occurred at a recent day Conference that was hosted for all Southern California Puente students at UCI. The Conference was designed to provide workshops on some of the following topics:

1. Careers and Employment opportunities for the year 2000 and Beyond.
2. Transfer to the University for a Community College - A Student Panel of former Puente Community College Graduates.
3. How to Finance a four year University Education.
4. Garry Soto, Author and Professor from U.C. Berkeley.

Students were asked to write their impressions after each workshop session.

The Gary Soto, author, session 1 - which had standing room only, generated some of the following excerpts:

"This workshop strengthened my interest in writing professionally ..."
This student is interested in journalism.

"I was able to relate to Soto's writing's and that was a positive experience..."

"I can increase the amount of time I spend on my writing, if Gary Soto admits to spending hours on rewrites."

The Career Panel, which consisted of professionals from UCI and Professional mentors generated comments on content and material presented, but comments even more important were statements students made which reflect motivation and belief in self.

To summarize, students indicated that their belief in their own ability was strengthened because they saw role models with similar problems who had succeeded in obtaining their educations. Some students felt they could overcome their own obstacles if other role models could succeed. One student simply stated she realized she would have to be her own support system since she had no family support for obtaining her education. A few students were impressed with, in addition to the professions of the speakers, the vast array of community involvement the the speakers demonstrated.

Frequently, students may demonstrate personal insights that may be as meaningful as content learning or material acquisition. This information can only be shared through open and unstructured entries in a Learning Logs.

Class selected: English 061 (9 o'clock section; EOPS students comprised 50% of class)

The project began the second week of classes with students writing generalized comments about THEIR assessment of their writing abilities at the start of the course. The first 5 or 6 logs concerned THEIR focussing on THEIR errors, finding them, and not getting too reliant at the beginning on the instructor being editor and proofreader. I asked them questions like:

LOG # 1: What do I think about my writing performance today? Did it help me or not to have the coice of topics given by the instructor?

In what particular ways can I improve THIS paper? Do I understand revision work?

What do I need most help with at this point in the course?

Response summary: #1: This was a 50-50 split; "I did well....considering..." or, "I know I can do better."

#2: Quite a few (50% of class) knew they needed extra tutoring assistance and more planning time. These turned out to be the EOPS students in the class (15 out of 30).

Note: The comments on "Planning time" became important to these students throughout the semester. Lower skilled students DO understand their deficiencies (these logs proved that to me) and they do want to learn to correct their problems, and they do perform better when more time is given to them than to the more "average" students in writing classes. I have since adapted time lines on the most difficult assignments for these initially lower skilled students. Out of a class of 30, 15 were EOPS placed students and 14 of them successfully completed the course. (One was dropped for excessive absence.) This is amazing to me! I really believe that the learning logs made the difference in high retention and success for these particular students.

#3: They well knew where their problems were at the start of the semester: grammar, in general; punctuation (especially commas and semi-colons); and word choices.

From LOG #2 (an entire week) (see form attached) I learned more about MY potential problems: I had students respond on how well I was communicating. They really enjoyed this. What I discovered was that I had successfully taught the Topic Sentence, Transitions, brainstorming, editing, and the value of peer evaluation. A total of 75% of the 30 students said that they had a clear idea of how to begin a paper and how to go about developing a topic. And, 85% felt more confident about detailed development from then on in the course.

An especially satisfying result of this log was that I had reinforced the value of individual conferences with me - as many as time permits within our 50 minutes segments. This level of remedial students learns much, much more quickly when taught individually - and 5 to 10 minutes a week can make that difference. They liked having pointed out positive aspects of their papers in progress, not just the negatives when a set of papers is returned, cold, with red all over them.

I also experimented with pair conference with me. Two students watched as I evaluated one or the other's work in progress. They were allowed to comment and help with the editing. They really, really liked this exercise. So many remedial students are shy, having been overlooked in the past and outshined ; however, as they week by week participated in these kinds of activities and were allowed to write "feedback" in logs, they gained the confidence needed to ask for what they needed. They learned.

I also discovered by the 4th week of logs that students didn't feel "singled out" because I reacted to the logs in a general way. They opened up more and more as the logs continued.

As the project continued through graded (previously papers were ungraded) paper 1,2, 4,and 5 (3 was something different), I assessed very, very specifically for grammar, punctuation and all the technical details of writing, in addition to the rhetorical modes we were studying. Students who had to REVISE for a passing grade had to fill in detailed logs (form attached) for the original and all necessary revisions which followed. The form is deliberately detailed and difficult and in random order. This forced students to concentrate on finding their error(s) and then coordinating these findings with the particular chapters in their handbook to solve the problem(s). Students found this tedious work; however, it turned out to be the kind of excessive exercise they needed at this point. They relearned a vocabulary which they could then use to express themselves with in class and gained confidence and self-esteem from this.

With papers 6, 7 and 8 (post mid-term work), I devised a different set of log forms (attached). From here on, I concentrated on evaluating higher writing skills, i.e. organization, use of transitions, cohesion, unity, and faithfulness to rhetorical mode(s). Students showed good progress in being able to tell me what they were doing on the next paper. I didn't have to repeat the process by this time: they had concentrated on the process so much because of the logs that they were then able to outline their own steps to writing.

Through the logs I also had the opportunity to check the effectiveness of various teaching methods: overhead transparencies, lectures, readings with discussion, small group work, one-on-one conferences, paired conferences, peer editing, out of class writing, and on-demand in class writing. Previously, I had just assumed these techniques "worked"; however, as a result of this project, I have made adjustments to teaching this courses in the future. I will do more pair conferencing, use fewer overhead transparencies, and monitor student discussion groups more carefully.

THE FINAL LOG required had to do with paper #9 (prior to the two finals): an ARGUMENTATIVE or OPINION paper, with documentation. This is the most difficult assignment of the term and I allowed plenty of time. Out of curiosity, I logged all three sections of 061 (8,9 and 11 o'clock classes). The 9 0'clock class had been my only "logged" class all semester: this was test to see if they were "sharper" in any ways than the other groups. (form attached)

Question #1: Group activities - readings - how did these help with paper #9?

8 o'clock: They liked reading three successful model essays and especially learned how to use direct quotes from them. They also enjoyed hearing their peers' ideas.

9 o'clock : Interesting result!!! This (control) group, which had been self-criticising all semester, was more critical and had more

sophisticated responses than the 8 o'clock class. They became annoyed with peers who wouldn't contribute to the discussions.

11 o'clock: This was a class of "high" achievers from the start. They made the group sessions work for them. As sophisticated readers, compared to the 8 and 9 o'clock classes, their interactions were more "academic" than "socially reinforcing".

QUESTION #2: Was instruction sufficient for this assignment?

8 o'clock: These students needed REPETITION from me about the new technical requirements for an assignment (direct quoting, paraphrasing, using ellipses, providing a bibliographic entry). Although only 1 or 2 magazine or newspaper articles were used, students found this a challenging project. A number of individual conferences were needed with me for a large number of these students. Lecture and demonstration on the board and completely clear handouts were not sufficient for this group.

9 o'clock: This "control" class indicated their continual reliance on extra tutorial help, especially for this long assignment (multi paragraph paper). Responses were positive. They wrote logs in complete sentences, not just phrases, and indicated growing fluency in writing. Self-esteem, I'd say, had definitely increased.

11 o'clock: Generally well satisfied group - only negatives came from those who indicated that their absence(s) hurt them. They found the assignment too difficult to "get on their own". Individual conferencing was necessary.

QUESTION #3: Were the handout materials of value since research techniques were not included in the 061 handbook?

8 o'clock: All positive responses.

9 o'clock: Very specific responses, in great detail: positive responses.

11 o'clock: All positive responses. They indicated materials helped most when working alone at home.

QUESTION #4: Any additional comments?

8 o'clock: They enjoyed doing something difficult and different at the end of the semester. They like giving their own opinions. This assignment interested them and they found it interesting because of new material, different from anything else this term.

9 o'clock: This "control" group also found this a challenging, "fun" assignment. Responses indicated that this group of students had become adept at self-criticism and were very open with their comments and suggestions for the teacher in future classes.

11 o'clock: This class liked having choice of topic, liked the "new" and more difficult assignment, and appreciated a challenge at the end of the course. They also commented on this assignment's relevance to other courses they were taking. What this meant to me was that they were ready for English 101.

The results are obvious throughout this report. The poorly prepared student did, indeed, benefit from the learning logs. The very high retention and course complete rate testifies to this. It is a new experience for me with such poorly prepared students. Also, and I think this is important, is that at least six EOPS students who passed 061 with C or even B decided ON THEIR OWN to not go directly to 101; they came back for written statements from me to be able to enroll in ESL 110 (the ESL equivalent to 061, mainstream course). THEY knew they weren't yet prepared for the big jump from 061 to 101. Now that's success.

Thank you for this opportunity.

AN OVERVIEW OF MY EXPERIENCE WITH CLASSROOM ASSESSMENT

Learning Logs - Spring 1991

Bonita Jaros

During this semester I chose to use a formalized assessment mechanism in Learning Logs, in all my ESL classes. I have been using learning logs as a metacognitive tool and as a two-way feedback mechanism since 1987. I have also used them as a means for students to analyze readings in preparation for writing assignments. I learned to use both types of logs when I was a Fellow of UCI Writing Project, and I have found it an effective way for students to ask questions about things they don't understand for them to generate ideas for papers, and for me to give them constant and immediate feedback. This facilitates communication, especially among culture groups who do not feel as free to express themselves orally as others.

The new element that was added this semester is that I asked my students how they felt about the logs and what purpose they saw in doing both types of logs. The classroom assessment, therefore, contributed a dimension which helped me improve my teaching. What I discovered was surprising. The students liked the logs in general and felt they were helpful for retention and application of information, but many of them believed they were doing in depth analysis. In fact, they were only taking notes and pointing out what they needed more information about in some cases! This led me to create an entire assignment to teach the shell of analysis and synthesis. Not only did the logs improve after that, but the general quality of the writings improved. Therefore, the perception of the logs became important.

As a result I will continue to use logs in all my classes, but I will make sure students use them for the purpose of developing higher level critical thinking skills. They can be a communicative tool for both teacher and student, but they can serve a much larger purpose as well.

Thank you for offering me the opportunity to participate. It has been a tool for self-improvement as an instructor.

#52c2/jaros.fin
5-6-91

Classroom Assessment: Learning Logs
Final Report - Spring 1991
Elizabeth Macey

Description: Students in English 278, Women in Literature, were required to keep a learning log for the entire semester. The average journal (submitted on May 14) had between 150 to 200 pages of comments, questions, summaries, and reactions to the assigned readings. I read each of the journal entries and wrote my comments or explanations on about half of the student's entries. They shared the journals (learning logs) periodically with their classmates and commented in writing on one another's response to the literature. As a result, each student received written feedback on nearly every page of the journal, thus providing a type of written dialogue about the stories, poems and drama that we studied.

Process: I began the semester with one approach, then changed the procedure at midterm. From January to March the students had the following directions:

1. Read the assigned work completely without writing anything in the journal.
2. Read the story, poem, or play a second time, this time noting any lines that please you, puzzle you, surprise you, irritate you, or in some way cause you to note them more critically.
3. Copy these lines verbatim on the left side of an 8 1/2" by 11" notebook paper which has been vertically folded down the middle. Be sure to include quotations marks and the page number. Try to select quotations from the beginning of the story, the middle, and the end.
4. On the right hand side of the page, directly opposite the quotation, write your reaction. This is also a good place to increase your vocabulary by copying a line on the left side that contains an unfamiliar word, and then writing the corresponding definition on the right side.
5. At the top of the page, write the title of the story, the author, and the date you wrote the entry.
6. Write on one side of the paper only, and do not include anything you are unwilling to have read because both your teacher and your classmates will read and comment on your journal.

At midterm, I did a classroom assessment and from the responses I got, I learned that the students found the journals to be very helpful, the enthusiasm seemed to be waning. The need to respond to the journal so frequently seemed to be causing an element of tedium and routine to replace interest and excitement. As a result, I changed the format. The new directions for April and May were as follows:

1. Journal entries are required for each of the short stories in the anthology, but not for the poems, the plays, or the novel.

2. Read the story at home, first for enjoyment and then for a better understanding.
3. Summarize the story. Include the names of the characters, the setting, the plot. Try to include enough information so that one who has not read the story would be able to read your summary and have a clear understanding of the assigned story.
4. After your summary, skip a line and include any observations, questions, or reactions you have to the story.

At regular intervals throughout the semester, the journals were shared in class. Each time was different. The first day the students shared, I had them pass their journals around to the other members of their small group. The next time, I asked them to place the journals on the desk, get one and write comments on it, return it to the desk and pick up another until they had read three journals. Another time the students sat in a circle and passed the journal to the person on the right. In short, I varied the routine so that by the end of the semester each student had a good chance of having read each of their classmates' journals. Best of all, each student had some comments or reactions from each of her peers. At the end of each of these journal sharing class days I took the journals home and added my comments. I feel that knowing they were writing to be read by both the teacher and their peers helped keep the entries focused and detailed.

Analysis of the journals: In a typical literature class, the teacher is always aware that she can assign a story to be read and then find that half the class has not read it. The journal (learning log) is a big help toward avoiding that problem. Moreover, the journal entries are useful in helping a student remember what she had read. (For example, the physical reinforcement of writing a character's name helps one remember that character.) The journal also provides an opportunity for personal or emotional involvement with the literature. I particularly remember one woman who came to my office after writing about one of the stories involving rape. She said when she started to write in her journal she couldn't stop until she had said many things that had been pent up inside her as a result of her rape six years ago. She even asked to read her paper to the class. She did so, and an important discussion ensued.

Grading: I graded the journals on the basis of points. Each time I collected the journal, a student could earn ten points if all the entries were complete. This did mean that an excellent journal got the same ten points an average one would, but I believe it would be too cumbersome to try to grade on the quality of the entry. I collected the journal five times for a total of 50 points. Other papers, tests, etc, contributed to a total of 200 points possible for the semester, so the journal was 1/4 grade.

Student's assessments: On the last classroom assessment questions of the semester, I asked the students to list any benefits gained from keeping the journal. Some of the comments were:

"...caused me to notice style and detail."

"...writing words or terms I didn't know and looking them up."

"writing in response to each page."

"I got so much more out of the reading."
"Picking out certain passages was good."
"I liked reacting to the stories."
"I've learned to enjoy reading again."
"Helps me to understand."
"I retained more of the story."
"Helped me to analyze the story and read for insight in addition to enjoyment."
"The journal is a good tool for a better understanding of the work."
"It's interesting to see how others read something into the story that you didn't."

I also asked students to tell what was least beneficial about the journals. Some responses were "To avoid Burnout" - because I did experience it towards the end of the semester.

"I would divide up the syllabus between sections."
"I found it more educational when we had to do a writing for each page instead of the summary."
"Least beneficial was trying to say what the lines meant to us."
"More beneficial for stories than for poetry."
"Time consuming"
"Entries for each page was a little much."
"Doing writing on poems."
"I found it harder to write the summaries that dealt with death."
"...a lot of work."
"Some stories I didn't like and didn't want to spend time on them."
"...it is not necessary to write on all the material that is read."

Summary: I found the journals very helpful in a variety of ways. To begin with, the students kept up with the reading assignments (for the most part) because they had to write in the journals. Secondly, the sharing of the journals provided insight and information, but a more important payoff for me was the interaction and camaraderie that resulted from reading each other's comments. Also, the journal entries provided a good springboard to the discussion of the works. Moreover, the journal provided an opportunity for students to do a lot of writing (which English teachers are convinced they need) without having to worry about a misplaced comma or a dangling modifier. The negative aspects the large amount of time needed when I collect the journals and respond to their writing. Nevertheless, reading the journals and writing to the students is pleasant because it provides me an opportunity to react on a one-to-one level, so the time is well spent.

Class Room Research
Learning Logs: The Final Report
Gregory Pezzetti
Fall 1990

The author was involved in studying Learning Logs as a tool to facilitate student learning in three sections of introductory psychology in the fall of 1990. In the first week of the semester, he instructed students in how to prepare a formal Learning Log consisting of chapter outlines, class notes, and the student's personal, subjective reaction to what was covered in the text, lecture, classroom discussion, study periods, or whatever.

Within the first two weeks the author found that students were reluctant to keep Learning Logs. So he used the ploy of offering 3 bonus points for every log submitted for evaluation. This produced some student cooperation and a number of students began to keep Learning Logs. Several reports were generated after each unit test to evaluate the mean performance of those using Logs and those not using Logs. The mean performance of those using Logs was usually slightly higher than that of those who were not using Logs but it was not statistically significantly higher.

As part of the final exam, the instructor gave students the option of gaining an additional 5 points for completing a survey of usage of the Study Guide, Learning Log, or a combination of the two. Students were informed that just completing the survey by checking boxes would gain them an additional one point, but if they would write their comments, they could gain up to a maximum of five additional points relative to the amount they wrote. The final data in this report is based in part on the results of this survey, a copy of which is attached.

Students in general thought the Learning Logs were helpful and 46 of 52 respondents (89%) thought Learning Logs should be purchasable in the bookstore along with the text and Study Guide.

A Chi-Square contingency table was constructed using surveys and final course grades thus:

Study Guide Only				
Number of Lessons Done				
	0-4	5-9	10-14	15+
A	1			4
B			6	9
C	2	3	5	4
D		1		

If students reported using at least 5 study guide lessons and at least five learning logs, they were included in the next Chi-Square table below:

Study Guide and Learning Log
SG Lessons Completed

	0-4	5-9	10-14	15+
A			1	3
B			3	1
C	1		3	5
D			1	

For Table I Chi-Square's value was statistically significant at the .05 level, indicating that the use of the study guide is associated with course grade. The data suggest the greater the usage the higher the grade tends to be. This shouldn't be surprising since involvement with material is usually associated with mastery of material and both the Study Guide and the Learning Log require student involvement. The use of Chi-Square here may be inappropriate, however, because of the number of cells that have frequencies fewer than five. Though the Chi-Square model doesn't quite fit; still it is informative in a rough way. Chi-Square for Table 1 was 18.4187 which is significant at the .03 level. A Cramer's Statistic computed for this data (remember the values are probably unreliable because of the low frequency cells) shows phi-prime (read about like a Pearson coefficient) to be equal to +0.42--suggestive of a moderate correlation between Study Guide usage and course outcome. There are so many cells with frequencies fewer than five in the second table that Chi-Square's value is probably not reliable at all. It was 4.680556, which at 9 degrees of freedom, is not significant at the .05 level.

A two-tailed t-test for independent means was calculated for the mean final course grade of a sample of 24 students who used Learning Logs (and Study Guides) and a sample of 36 students who did not use learning logs.

	Mean	SD
Used Learning Logs	2.38	.97
No Learning Logs	2.67	.93

The resulting $t = -1.16321$ is not low enough ($P\text{-value} = .24950$) to reject at the .05 level the hypothesis that there is no difference between these means other than random chance alone would suggest.

Still after all is said and done, students by and large manifested in their surveys their confidence that the Learning Logs helped--even though the author has been unable to measure statistically their effectiveness. Some of the author's students' comments on the surveys have been selected to give the flavor of

student response. These are typed below.

"The study guide helps you go from section to section through the book. The learning log helps you understand what the book is trying to point out. The learning log helped me more because I wrote my ideas in and therefore they were easier to them [sic] back into my memory. Both the study book and the learning log helped me a lot, but I like the learning log best."

"The study guide gave great examples while the L.L. made you conclude your own thoughts."

"Using the study guide surely helped in preparing the objective tests, and showed me that reading the book was definitely not enough to master the material. The study guide and the learning log helped me organize the chapters better so I could get better view of the subject matter and helped me retain the information longer. The study guide turned out to be quite fun at times and challenging too."

"It is my feeling that the study guide helped me more on the computer tests, and the leaning logs helped me more on the written tests."

Finally, it is encouraging to the author to report that 43 of 48 students responding to the survey on Learning Logs indicated they would purchase Learning Logs in the bookstore, if they were made available. That is 90% of the respondents found them useful enough that they would invest their money in them.

MULTICULTURAL

by

Wayne Gibson - Mathematics

Priscilla Leathers - Human Development

Fran Williams - Human Development

CLASSROOM RESEARCH REPORT CULTURAL DIFFERENCES IN THE CLASSROOM

WAYNE D. GIBSON
DECEMBER 8, 1990

I assessed (worked with) my 11:00 A. M. Intermediate Algebra class. To say that cultural differences is a challenge in the classroom is a true understatement. My first efforts were centered around assessing the class' ability to synthesize the algebraic concepts that they had studied. During the first 6 weeks (16 weeks in a semester) I used the classic anonymous 3x5 card to evaluate their ability to solve problems requiring a synthesis of their acquired skills in mathematics. Each respondent was asked to indicate the culture he/she identified with. My evaluation of the responses indicates no significant differences in solutions based on their cultural identification. At about the seventh week, we came upon a type of problem that required an understanding of the positional number system for solution. The solution of the problem demanded the representation of a 3-digit number in an algebraic fashion. I estimate that over 90% of the class was visibly and audibly shaken when I wrote

$$100 H + 10T + U$$

as a representation of a 3-digit number. The class preferred

HTU

(H representing the hundreds digit, T the tens digit, and U the units digit). I backed off. Somewhere in my past there was a remnant of a memory of the Mayan number system. Their system was positional and represented an ancient culture that provided an identification for a large part of the class (I didn't consider the schism between *Indio* and Hispanic). Why not prepare a unit on the Mayan number system, present it, and see if the class would be better able to deal with "number problems." The day after I presented my "Mayan number talk", I asked my class to evaluate its merit. They were asked to complete the sentence, "The talk on Mayan numbers was...." During the course of my Mayan discourse, I continually drew analogies to the Arabic number system. The evaluation of the class' increased ability to deal with positional number concepts will come in the last week of our class, when we review "word problems."

I received the following anonymous responses from the class members present on the day following the Mayan lecture, again on 3x5 cards, and their indication of cultural identification.

	POSITIVE	NEGATIVE
Latino	12	3
Asian	7	0
Anglo	7	0

Some sample responses:

"amazing dude

the most interesting I seen in college

*the talk on number interesting. I like but not
much*

new

interesting and unique

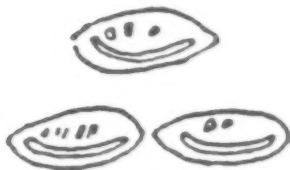
weird

*a waste of time we could have been reviewing; good
for another time"*

I prepared my report entirely on the mathematics department's Apple Macintosh. This provided an extension of my own cultural horizons, Microsoft Word 4.0. This is the first report I have ever prepared with a word processor. I hope this will help explain some of the lost foot notes and unorthodox appearance.

A TRIBUTE TO THE ANCIENT MAYA

Among many teachers, there is a belief that an enriched understanding of the familiar is often obtained by examining the properties of a similar system; a different system, yet much the same in an abstract propinquity. Our goal is to gain a deeper understanding of the positional number system; the system each of us use daily. To achieve our objective, we will study the number system of an ancient mesoamerican civilization: the Maya.



THREE EXAMPLES OF THE
MAYAN ZERO

The classic era of the Mayan civilization, located in the lowlands of southern Mexico, Guatemala, Belize and western Honduras, began sometime in the third century BC and flourished into the ninth century. The empire of the the Classic Maya had disintegrated long before the Spaniard,

Hernando Cortez, vanquished the Aztec in the sixteenth century. Due to the religious fervor of the conquistadores, many of the ancient Mayan writings were lost. It is only due to a much lower level of the remnants of the Mayan civilization still surviving in Yucatan, and the host of Indians still living in the ancient Mayan boundaries who speak a form of the ancient language, that scholars have begun to know the range and extent of the Mayan knowledge.

The skills that the Maya developed to perform numeration are regarded with a great deal of respect among the scholars who study their ancient ways. As best we can determine, the Maya used two significant and different methods of counting. One method, based on

twenty, or vigesimal, is much like our method. The Arabic system, the one we use, is based on ten. As we count, the first position on the right is full when we reach 10. When we reach 10, the right most position is full, and we carry a one to the second position on the left to indicate this; hence, 16 in the Arabic system means: 10 (one full group of 10) and 6. If we add 8 to 16, we first add the 8 and 6 which we have probably memorized is 14 ; then we increase the 10's position by one, yielding 2, and enter 4 in the right position. We read the sum as 24 (meaning two groups of ten and 4 left over). A simple task, if we have memorized the basic sums, such as $6+8$. European man, at a time commensurate with the Mayan civilization, commonly did not know these basic sums and employed an abacus to literally count the numbers and record the sum as the digits spilled over from one position to the next; not too unlike your odometer racking up the miles you drive. The Mayan system is very much the same, but based on twenty. Their base of twenty required a carry to the next position after the count reached twenty. However, the Mayan elected to raise the carry digit above the base or units digit. They literally stacked their digits from top to bottom.

Why did we choose ten as a counting base and they twenty? Finger and toes? Who knows? The most remarkable difference between our system and their's is in the Mayan choice of numerals. Rather than our ten different numerals, the Maya used but three. A dot or pebble represented one, and a stick or dash represented five. Their representation of zero takes many forms, but it is usually shaped much like an empty clam shell. The Mayan¹ numerals would be

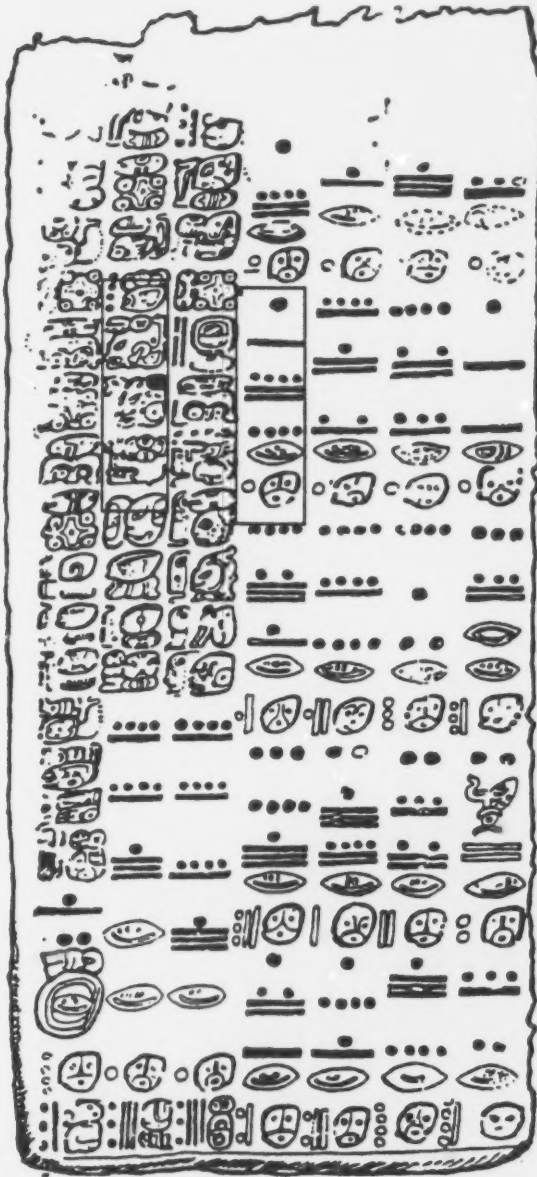
¹ In the Aztec system, numerals from one through nineteen were represented by aggregations of dots (in linear, broken-linear, or L-shaped array, and with various subgroupings, not necessarily by fives); scores were represented by flags, four-hundreds by tree-like figures, and eight-thousands by ceremonial pouches such as shown being carried by divinities and by priests for the containment of copal incense.

easier to learn than ours, and much more approachable in calculation, but the time required for the calculation would be a little longer because of the difference in number bases. The Maya would have to count to twenty before a position was full, whereas, in the Arabic system, we have to count to ten.

 1	 2	 3	 4	 5
 6	 7	 8	 9	 10
 11	 12	 13	 14	 15
 16	 17	 18	 19	

MAYAN TABLE OF NUMERALS

Study the numerals on this page, copied from one of the few surviving Mayan texts that has been in a museum in Dresden for over two hundred years. You can certainly appreciate the enormity of the task of the scholars who have devoted their lives to deciphering this complex form of communication.



1

5

14

4

0

1 Ahau

Mayan numerals representing a count of days from one 1 Ahau (the glyph at the bottom)

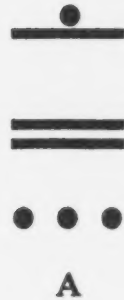
The many strange glyphs you see on the page of the manuscript represent days of the months, months, Gods, etc. Our attention will, of course, center on the meaning of the numerals. We have extracted from the page, a certain number that represents the passage of time from 1 Ahau, the first of the day named Ahau. You will see the Mayan numerals for 1, 5, 14, 4, and 0 arranged in a vertical column. Their positional number system used a column or stack rather than a row as we do. The numeral having the greatest significance is at the top of the column. Here we have the Mayan representation (regarding the representation as a true vigesimal number), which is our Arabic equivalent of :

$$1 \times 20^4 + 5 \times 20^3 + 14 \times 20^2 + 4 \times 20 + 0.$$

The value of this Mayan number, as expressed in our Arabic system, is 205,680. This would be equivalent to the value the Mayan would have placed in trade or commerce.¹

¹It is quite likely that the Maya system was used for routine counting procedures as well as for calendrical calculations. Bishop de Landa (1566) is clear on this point: "*de esta cuenta se servian mucho para la contratacion del cacao*" ("they employed this counting system extensively in the trade of cacao"). "Maya numeration was vigesimal. (It still is.) In the enumeration of days it was modified to accommodate a 360-day 'chronological year.'" Floyd G. Lounsbury.

MAYAN NUMBER EXAMPLES



The Mayan numbers in example:

A represents 6.10.3

B represents 2.7.5

C represents 5.10.15

The Arabic equivalent for each example is:

A) $6 \times 20^2 + 10 \times 20^1 + 3$

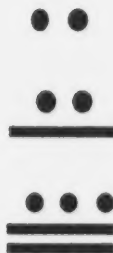
B) $2 \times 20^2 + 7 \times 20^1 + 5$

C) $5 \times 20^2 + 10 \times 20^1 + 15$

If we add 8 to each number in examples A, B, and C we get:



6.10.11



2.7.13



5.11.3

RULES FOR ADDITION



The addition of Mayan numerals is accomplished by summing the dots and bars in the corresponding parallel positions and adding any carry to the numeral in the level above.

Three rules are necessary:

1. A dot represents one unit
2. An accumulation of 5 dots is to be replaced by a bar.
3. An accumulation of 4 bars at one level becomes a dot in the level above.

The act of raising the dot is exactly analogous to the carry performed in our more familiar algorithm for adding Arabic numerals.



Glyph and numeral "one"

ADDITION OF MAYAN NUMBERS

To add the Mayan numbers 1.10.15 and 2.10.13, you could work the problem something like this¹:

$$\begin{array}{c} \cdot \\ \hline \hline \hline \end{array} + \begin{array}{c} \cdot \cdot \\ \hline \hline \hline \cdot \cdot \cdot \end{array} = ?$$

Think:

$$\begin{array}{rclcl}
 \begin{array}{c} \hline \hline \hline \\ 15 \end{array} & + & \begin{array}{c} \cdot \cdot \cdot \\ \hline \hline \hline \\ 13 \end{array} & = & \begin{array}{c} \cdot \cdot \cdot \\ \hline \\ 8 \end{array} & \text{(AND CARRY ONE)} \\
 \begin{array}{c} \hline \hline \\ 10 \end{array} & + & \begin{array}{c} \hline \hline \\ 10 \end{array} & + \cdot & = & \begin{array}{c} \cdot \\ 1 \end{array} & \text{(YOU CARRIED ONE)} \\
 \begin{array}{c} \cdot \\ 1 \end{array} & + & \begin{array}{c} \cdot \cdot \\ 2 \end{array} & + \cdot & = & \begin{array}{c} \cdot \cdot \cdot \cdot \\ 4 \end{array} & \text{(AND CARRY ONE AGAIN)}
 \end{array}$$

The sum is:

$$\begin{array}{c} \cdot \cdot \cdot \cdot \\ \cdot \\ \hline \cdot \cdot \cdot \\ 4.1.8 \end{array}$$

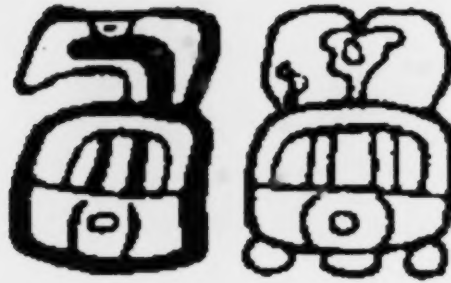
¹Diego de Landa, first Bishop of Yucatan, said that the Maya "*cuentan en el suelo o cosa llana*" ("count on the ground or something level"), suggesting a dynamic rather than a static process (de Landa 1566). J. Eric S. Thompson suggests that maize, beans, or pebbles were used as the counters and that the bean pod may even have been the inspiration for the bar symbol (Thompson 1941).

THE FIRST TEN MAYA DAYS

Yucatec	Codices		Inscriptions	
1. Imix				
2. Ik				
3. Akbal				
4. Kan				
5. Chicchan				 
6. Cimi				
7. Manik				
8. Lamat				 
9. Muluc				
10. Oc				

THE SECOND TEN MAYA DAYS

11. Chuen			
12. Eb			
13. Ben			
14. Ix			
15. Men			
16. Cib			
17. Caban			
18. Etz'nab			
19. Cauac			
20. Ahau			



Uayeb (the five days with no name)

The alteration of the Maya counting system for the purpose of chronology, which they regarded as a continuous reckoning of the count of days, may have been due to the religious trepidation with which the Maya regarded the five days that completed the calendar year of 365 days. Their essentially vigesimal counting system was modified to easily reflect the passage of 360 days or the chronological year. Their almanac of 260 days, with its enormous portent for what we would regard as astrology, would have made a count based on 260 understandable. Why did they choose to use a base of 360? The Mayan month contained twenty days and the chronological year was made up of eighteen months followed by a five day period called the *Uayeb*. The significance of these five days in their lives was enormous. Michael D. Coe, in *The Maya*, writes:

"Every single Maya ritual act was dictated by the calendar, above all by the 260 day count. These sacred performances were imbued with symbolic meaning. For instance, the numbers 4, 9, and 13 and the color directions appear repeatedly. Before and during rituals food taboos and sexual abstinence were rigidly observed, and self-mutilation was carried out by jabbing needles and sting-ray spines through ears, cheeks, lips, tongue, and the penis, the blood being

spattered on paper or used to anoint the idols. On the eve of the Conquest such idols were censed with copal and rubber as well as ritually fed. Human sacrifice was perpetrated on prisoners, slaves, and above all on children (bastards or orphans bought for the occasion). Never the less, before the Toltec era, animals rather than people may have been the more common victims, and we know that such creatures as wild turkeys, dogs, squirrels, quail, and iguanas were considered fit offerings for the Maya gods.

• • • But apparently the greatest ceremonies had to do with the inauguration of the New Year. These took place in every community within the Uayeb, the five unnamed and unlucky days (Coe later says this period occurred about July 16) at the close of the previous year, and involved the construction of a special road (perhaps like the Classic 'causeways') to idols placed at a certain cardinal point just outside the town limits; a new direction was chosen each year in a four-year counter-clockwise circuit. There were all sorts of omens, good or bad, for every year, but an inauspicious augury could be offset by expiatory rites, such as the well-known fire-walking ceremony in which priests ran barefoot over a bed of red-hot coals.

Throughout the year, there were agricultural rites and ceremonies for such important economic groups as hunters, bee-keepers, fishermen, and artisans, probably geared to the 260-day count if we may rely on the testimony of the Madrid Codex, which seems mainly devoted to such matters. Increase of game, abundance of honey and wax, and so forth were the purpose of these activities, which so often take the form of the 'sympathetic magic' defined by Sir James Frazer, for instance compelling the rain to fall by having the Chacs empty water from pots onto a fire."

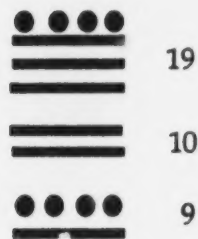


Chronology was the continuous recording of the days, reckoned from a hypothetical zero day some three millennia B. C. Lounsbury states that a precise correlation of the Maya and Julian day count remains uncertain. The Maya were no strangers to the very large numbers encountered in such a reckoning. In the Yucatec language we have: 20 kal , 20^2 bak , 20^3 pic , 20^4 calab , 20^5 kinchil , and 20^6 alau . In a neighboring language Lounsbury finds that *chuwi* is an equivalent of *pic* and is translated as "sack." Its use is said to derive from the custom of packing cacao beans in quantities of 8,000 beans to the bag (sack), i.e., 20^3 or *pic*.

The basic calendar of the Maya, as that of many other Mesoamerican's, was the 260-day almanac. It was and is the product of two component cycles: one of day numbers, from 1-13, and of twenty day names. In our example, from the Dresden Codex, we found 1 *Ahau*. This would translate as the first day cycle of the 20th day *Ahau* or the 247th day of the almanac or *tzolkin*.

Lounsbury refers to the 365-day year as the *haab* and the chronological year of 360 days as the *tun*. The units of 20 days were the *uinal*, and *kin* referred to single days. In the chronological count of the days, the Maya, in effect, could readily refer to the passage of groups of 360 days or *tuns*. In modifying the vigesimal system to the 360-day count, a change had to be made. The 3rd level of the numeral had to be increased when the level below reached 18. Thus, the quantity pictured in the third position represented the number of chronological years that had passed.

THE MAYAN NUMERAL:



would be interpreted (chronologically) as:

$$(19 \times 18 \times 20) + (10 \times 20) + 9$$

The interpretation would be:

19 cycles of 360 days: plus 209 days, or a total of 7,049 days.

This is 19 *tun*, 10 *uinal*, and 9 *kin*.



MAYAN NEGATIVE NUMBER REPRESENTATION

NEGATIVE NUMBERS

Page 23 of the Dresden Codex reveals another interesting facet of the numeric erudition of the Maya. In the lower left hand corner of that page you will find a zero with a bandage about it. This was the Mayan equivalent of a negative number. It is obvious from all accounts that the Maya were very much aware of the imperfections in the universe's clock. It doesn't run on an integer cycle. To correct for their lack of a fractional notation, the Maya simply fixed their chronology of days by subtracting the required amount from the existing total. They tied a bandage around the number of days required to bring their records up to a point that compared to observed celestial observations¹. The amount tied was then subtracted from the recording of the days counted to that point. The example in the lower right corner of the Codex indicates that -620 is to be added to¹ the previous count of days.



¹ See Lounsbury pages 785-786 and page 806. Lounsbury refers to the numbers as RING numbers.



Just a word about revisionism: The history of the development of the Arabic number system is one of many cultures exchanging information over many millennia. Lounsbury states:

the [Mayan] system of numerical notation was at least seven or eight centuries old by the beginning of the "classical" period...It is probable that the Maya received it ready-made, along with their chronological system and some components of their calendar, from other peoples in Oaxaca, Tabasco, and Vera Cruz.¹

David Humiston Kelley ponders the meaning of Stela B (a stone monument) found at Copan. I included a tracing of it for your conjecture and evaluation.



We adapt, we change, we modify, we grow.

¹ Lounsbury page 764.

Date: January 8, 1991
To: Mary Anne Anthony
From: Priscilla Leathers
Subject: Classroom Research Fall 1990 Final Report

This semester has been very interesting. As part of the Multi-cultural Classroom Research Project, I had the opportunity to meet other faculty from RSC Campus as well as other Community Colleges. The discussions centered on establishing open lines of communication with students who came from many cultures and different expectations. I received many excellent suggestions on how to stimulate class discussion, how to encourage written input for those students averse to speaking in class and how to strengthen student studying skill. All these techniques will be utilized in subsequent semesters.

After writing about my last classroom research activity, I became aware of the necessity to spend more time in looking at the data provided by students. I had used "focused listing" to assess students on how one's cultural background affected their understanding of mental health and mental illness. In compiling the data, I tried to categorize the information into grouping with similar responses. This was not possible due to the variety of the responses. Several days later, after reflecting how I might have gained more insight from the activity, I decided it would be beneficial to categorize the responses into 3 major headings. These would be "self", "family", and "community". One important thing I learned was the need to emphasize cultural issues more often and relate the differences to more of the lecture material on treatment modalities.

Students still are not sure of the concept of "Cultural Diversity" due to their own lack of experience and ethnocentricity. I am revising my lecture schedule and class objectives to broaden their understandings - and my own as well.

Overview

The following is a list of five of six exercises conducted as part of the 1990 Classroom Research Project focusing on Multicultural Infusion. The first of these six exercises was reported earlier under separate cover.

All exercises conducted by this researcher were conducted in my Human Development 110, Child, Family, Community class.

Course Description:

Dynamics of the process of socialization of the child. Influences of family, school, and cultural differences. Community support resources and advocacy for children explored.

Additional exercises not shown in this report were activities in Cross-Angelo techniques to include the One Minute paper and three spontaneous, Clearest-Muddiest evaluations of lectures.

Some of the benefits gained by me from participating in this project were that it

- (a) provided a bases for me to make changes in planning lectures for the course that focused on reported areas of need.
- (b) helped determine the effectiveness of my teaching.
- (c) assisted me in monitoring what students were learning.
- (d) examined students need for information offered.

Multicultural Classroom Research Exercise II

Goal:

To examine student attitudes and perceptions of parent involvement based on ethnic identity.

Activity:

Each student randomly selected one of 27 3 x 5 cards that were preprinted either African American, Mexican American or Vietnamese on one side. They were then asked to write on the blank side whom they thought was most likely to attend a parent-teacher conference from the ethnic group they selected. Their choice was limited to selecting one of the following: mom, dad, both mom and dad, either parent, or another adult family member.

Results: 6 of the nine who drew African American said mom.
5 of the nine who drew Mexican American said either.
8 of the nine who drew Vietnamese said both.

Information was used to introduce the topic of planning parent-teacher meetings for preschool.

Multicultural Classroom Research Exercise III

Goal:

To make students aware of some of the basis of their decision making and value judgment.

Activity:

Students were asked to recall a saying or adage that was frequently used by their family members while growing up. They were then asked to indicate how the sayings influence their present day decision making and values.

Results:

Students presented a host of sayings that centered around financial thrift, use of time, and relationships.

Information was used to illustrate possible cause for value conflict between members of different ethnic groups.

Multicultural Classroom Research Exercise IV

Goal:

Information assessment to evaluate knowledge of ethnic groups and to identify group to which they were most familiar.

Activity:

Students were given blank 3 x 5 cards and were asked to write which of four ethnic groups: African American, Asian American, Mexican American, or Native American, they needed information about most and least.

Results:

17 of a class of 27 indicated that they needed information most about Asian Americans, 8 indicated Native American and 2, African American. 20 students indicated least needed, Mexican American. 5 African American, and 2 Asian American. Information on the cards was collected anonymously, however, there was an open discussion in class as the responses were read to the class. During the discussion, students reported their cause for most needed was based on personal exposure and occasion for day-to-day interactions.

Information provided basis for course planning and focus of future lecture topics.

Multicultural Classroom Research Exercise V

Goal:

To familiarize students with community resources common to neighborhoods in ethnic minority communities.

Activity:

Students were asked to make a focused listing of resources they believed common to dominant culture communities and to create a similar listing for ethnic minority communities based upon previous lectures and class reading assignments.

Results:

Students become mindful of different community resources found in various ethnic neighborhoods. They were also aware of the likelihood of resources not present in some ethnic communities that would have an impact on the young child's experiences and sense of self.

Exercise reinforced focus on neighborhoods that is included in the course.

Multicultural Classroom Research Exercise VI

Goal:

To determine whether there were differences between cultural groups in how they cared for their young children with common ailments.

Activities:

Students were given blank 3 x 5 cards and asked to write the ethnic group to which they identified. They were then instructed to turn the card over and write how members of their family are most likely to treat a child with a common cold.

Results:

Variations of treatments from home remedies to over-the-counter cough medicine were clearly identified with ethnic groups where specific remedies were distinctly identified with ethnic groups, i.e., heated vicks vapor rub reported most commonly used by Mexican Americans.

Students were made aware of possible implications for school attendance, requests from parents to administer medicine to children while at school and interpretation of body marks on some children.

COMPUTER ASSISTED INSTRUCTION

by

Jacque O'Lea - Adult Basic Education

Gregory Pezzetti - Psychology

118

3-92

Jacqueline O'Lea
May 25, 1991

Classroom Research

Computer-Assisted Instruction

Innovation is a word which is often overused, especially in relation to classroom methods and materials. The number of technological innovations in recent years has been staggering. The use of technology and its application in the classroom have been of great interest to me for the past several years, but it is often difficult to find ways to integrate this technology into the curriculum. We have been fortunate in recent years to have acquired computers in our Adult Basic Education classroom, and so, I felt it imperative to explore the use of these computers in the context of the A.B.E. curriculum, specifically our reading and language arts curriculum.

The A.B.E. reading and language arts curriculum were chosen because the majority of the students in Adult Basic Education classes at Centennial Education Center are limited English proficient students. These students frequently have a deficient educational background in their native languages which, coupled with their limited proficiency in English, often hampers their progress in other components of the curriculum.. Adult Basic Education is a class which commonly functions as a bridge between the English as a Second Language classes and the High School Subjects Program, vocational programs, or college credit classes. A level of proficiency in reading and language arts is one of the determining factors in a student's articulation into these other programs, therefore, it is imperative that we assist the students in any way possible to make this transition.

A great deal of computer software exists in the areas of reading and language arts, but much of this software is designed either for children or for a more sophisticated audience, with greater facility in English. It is often difficult to find software specifically designed for adults with limited English proficiency. After much searching, we began to use software developed by the Educational Activities Corporation. It was my hope, through this classroom research project, to further evaluate these software programs by tracking student progress while eliciting more student feedback through Cross/Angelo and other classroom research techniques

Diascriptive Language Arts Development is an interactive tutorial program which is diagnostic, prescriptive, and developmental, as its name implies. It provides individualized instruction with immediate feedback and positive reinforcement at a rate controlled by the individual learner. Through application of and practice with punctuation, grammar, spelling and usage, this program addresses language arts development in six major skill areas: **Sentence Mechanics**, **Sentence Sense**, **Naming Words (nouns)**, **Action Words (verbs)**, **Pronouns**, and **Describing Words (adjectives and adverbs)**. The emphasis throughout the program is on learning how to use language to convey meaning as clearly as possible. Each of the six skill-area disks contains six instructional levels. Items included in any given level are those found in many curriculum guides and texts

The Diascriptive Reading Program is a diagnostic, prescriptive, tutorial reading program that will diagnose the reading skills of each student, prescribe what is needed for improvement, and evaluate performance at each level before directing the student to the next program. The program includes five skill areas: **Main Idea**, **Details**, **Sequence**, **Vocabulary**, and **Inference**.

Depending upon performance, the student is "prescribed" a level with which to start each skill area disk. Each level in each skill area roughly corresponds to a reading difficulty level for the appropriate number grade. Through the development of the skill areas, it is hoped that the student will increase his/her reading comprehension, and will also benefit from the immediate tutorial responses as well as from the opportunity of being able to progress at his/her own rate.

Fifty-two students were given the diagnostic pre-tests. Eighteen of those students did not complete any follow-up lessons. This was due to the fact that midway through the semester, the computers we had been using were disassembled and removed and a new computer system was installed in its place. Unfortunately, the Diascriptive Language Arts and Reading software had to be exchanged for that which would be compatible with this new computer system. Consequently, the findings in my report are somewhat incomplete and also rather late as I had been hoping that the software exchange would occur more rapidly. (Now for the good news!) Of the thirty-four students who completed the majority or all of the assigned lessons, the results were astonishingly rewarding, and the student comments extremely positive. Students were required to reach a mastery level of 80% on each lesson in order to proceed to the next lesson. Instead of making a blanket declaration of this rule, I encouraged students to repeat problem lessons, or provided other off-line materials to assist them. I found, however, that students became adamant themselves about enforcing this "rule", and began to take real ownership and responsibility for material. Even students who are often quite timid became more assertive about requesting help, either from an instructor or from another student. A record sheet was given to each student on which to record which lessons were completed, as well as the scores and any questions with which

they may have had difficulty. The students were also asked several times during the semester to respond anonymously to questions about which lessons were the most helpful, least helpful, most interesting, fun, most difficult, etc. Since each student works on his/her own prescription, there seemed to be no particular pattern to the answers, except that there were very few negative comments, and lots of positives!

Because the computer provides each student the opportunity to develop each skill at his/her own pace and not at a pace dictated by the performance of others, students seemed to feel more self-motivated and less frustrated. They reported that they enjoyed working alone at times, or with a partner at other times, especially on difficult lessons. It was also often helpful to use peer tutoring techniques at times by having students who had recently mastered particularly difficult lessons tutor another student who was experiencing difficulty. This seemed to reinforce recently acquired knowledge as well as bolster confidence. Each student response is immediately evaluated, and the computer responds appropriately providing encouragement for correct answers and instruction for incorrect answers. In a traditional setting, a teacher could only provide similar responses for each question when working one-to-one with a student.

Upon completion of the lessons, the students were again tested and all showed dramatic improvement in their scores. The average growth in reading level was approximately three grade levels. Even those students who did not complete the program showed significant strides. Best of all, the students unanimously responded positively, even those who had been "computer-phobic". I believe this was due in large part to the fact that they could see immediate results. When students were tested for advancement to the high school program, all of the students who completed (or were close to completing)

the programs received sufficiently high scores to enter the high school subjects program.

Despite the fact that not all the students were able to complete these programs, I feel that the outcome was positive enough to warrant continued usage. Furthermore, the student feedback was extremely encouraging. For students who may be relatively low functioning, the computer offers a sense of sophistication and accomplishment. In today's technologically advanced society Adult Basic Education students who are struggling to acquire basic skills need every opportunity and tool possible to encourage and assist them. Student self-esteem is enhanced by using the computer. Even very simple lessons appear more sophisticated, so students feel quite proud to be using computers. Computer-assisted instruction is one additional weapon in the arsenal to combat illiteracy.

Class Room Research
Computer Assisted Instruction: The Final Report
Gregory Pezzetti
Spring 1991

The author studied Computer Assisted Instruction (CAI) as a tool to facilitate student learning in introductory psychology in the Spring of 1991. In the first week of the semester, he instructed students volunteering to use CAI how to access their individual accounts on the district's CAN mini computer to work on Chapter materials that the instructor, from past experience, had identified as being difficult for students to grasp; e.g., the concepts of independent and dependent variables, the basic anatomy of the cerebrum, etc.

The author, focusing on these difficult concepts, has worked to prepare a module of CAI for each chapter of text. Thus far this semester he has started ten modules and completed two.

The completed and the uncompleted modules provide students with instruction and then test the students over the material just presented. The student volunteers were asked to participate in the CAI and to provide the instructor with feedback on how the modules could be improved from the student's point of view.

As students work through the materials prepared, they read computer frames of instruction and then answer questions relevant to the materials just presented. Their responses to these questions evoke prescriptive feedback that is timely, complimentary, and branching so as to take the student to the areas where further instruction, as indicated by their response patterns, appears necessary for mastery of the concepts being presented in a given chapter.

Prescriptive feedback positively reinforces students' correct responses and often branches into deeper penetration of material; prescriptive feedback also corrects wrong responses and still attempts to positively stroke the students' performance to encourage better effort; and finally feedback branches the student making wrong choices to appropriate further instruction.

Although most of the modules are incomplete, student feedback has been positive. Students involved in the program are demonstrating improved test scores on the department's objective multiple choice and essay measures.

A comparison of the performance of two groups of students was made in April. As sections completed their third unit of instruction, 41 students who were not involved in the CAI program were compared with 18 students who were using the CAI modules prepared for the course in introductory psychology. Means were developed for the two groups and an independent t test was used to test the claim that the CAI group performed better on the Unit Three Exams than the Non-CAI group.

CAI (n = 18) Non-CAI (n = 41)

Means	73.72	70.51
StnDvs	10.02	17.60

$t = .885778$ (P-value = .18)

The instructor could not reject the hypothesis that these two means were just chance variations of some real mean that exists out there for all students. However, the means were in the direction of the hypothesis. And, perhaps, more importantly the Standard Deviation of the first CAI group was much smaller (statistically significantly smaller ($\alpha=.05$): $F = 3.08526$, P-value = .01484) than the Standard Deviation of the second Non-CAI group. That difference in the Standard Deviations could be the result of the selection process--remember students self-selected into the CAI group--or it could be the result of the CAI experience. The instructor would like to believe it is the latter rather than the former, and his knowledge of the two groups suggests that it could be that way.

A second measurement was conducted after the Final Exams in May. The same procedure was employed: Means were obtained for the CAI Group and for the Non-CAI group.

	CAI	Non-CAI
Means	74.75	71.81
StnDvs	13.79	17.64

$t = 1.636$ (P-value = .33)

Again the instructor could not reject the hypothesis that these two means were just chance variations of some real mean that exists for the population of his students and these samples are just random chance variations of that mean. Still the CAI group has gotten just a little farther away in a positive direction from the Non-CAI group (Compare the t-Test in May: $t = 1.636$ to the t-Test in April: $t = .886$).

To date the instructor has finished two of the ten modules begun in the semester's passing, and added considerably to the other eight. He will continue to work on these modules during the summer to bring more to completion, and he intends to use them more extensively in his summer classes. His plan this summer is to require all students to use the modules and to compare at the end of the summer this summer's students with last summer's students.

I'd like to thank the Rancho Santiago Community College District and especially Mary Anne Anthony for the support given in this project. It is the instructor's conviction that computer assisted instruction will play a larger and larger role in education, and that it will in time be perceived as an excellent way for students to gain greater mastery of traditional subjects.

If the reader would like to play with some of the materials prepared this semester in this project, go to L-206, sign on to the SAC Computer Network (any of the staff in the L-206 would be glad to assist in signing on to CAN), sign on to the CAN Computer by typing CAN at the prompt "Enter Class," and then at the prompt "identification," type NSYS02 and press Enter. To the question, "Is your name General Panic?" answer Yes and press Enter. To the question "Module Number?" type 1 and then Enter. Have fun.

"OTHER"

by

Sharon Allen - ESL

Caroline Baca-Frye - Counseling

Karen Dennis - ESL

Betty Dixon - English (2)

Wayne Gibson - Mathematics

Marilou Morris & Melinda Womack - Speech Communication

Charlene Pearson - Counseling

Myrna Sorensen - Mathematics

Terry Tomlinson - High School Subjects

FINAL REPORT
Spring 1991: Multicultural
Sherry Allen

This semester I have planned a number of activities to use in my ESL Intermediate III and ESL 107 classes that will focus on awareness of cultural diversity. In the Intermediate III class I have planned a number of exercises on how various cultures do various things, i.e. celebrate, date, assimilate, accept, etc. In my class I have 15 different nationalities, and I plan to use Cross-Angelo classroom research techniques several times during the semester to ask students what they have learned that was interesting about another culture and what they would like to hear more about. Also, I will focus on issues of cultural implications in my 107 class.

On my first data day in Intermediate III, I received comments of students being especially interested in Iran. In my class I have four Iranian women: one who is here for her husband's business, but totally supports and admires the current regime, two who left because of distress from the new regime, and one Jewish woman who is a refugee here. All of them volunteered opinions and information on their perceptions of the war, Moslem religion, dating and marriage customs in Iran, etc. The discussion was amazing to me for its openness and the way the whole class seemed focused on understanding rather than judgment. The class was surprised to learn Iranians are not Arabs, but may be Moslems, etc.

The class is also writing in journals three times a week, and I encourage them to consider writing about feelings they have about other cultures, telling me about special things in their own lives, or reacting in some way to the multicultural aspects of Orange County. The following are a few comments from those journals indicating something they had not thought about before concerning cultural diversity.

"People are not good or not because of color of eyes, race, etc..."

"We can not evaluate people by color, race, etc...."

"When you think you are on top you work better."

"The surrounding that we grow up in makes the feeling of discrimination inside of us."

"The idea that comes to my mind is when people are treated inferior they act inferior."

"When I saw the children's faces they look sad, or mad just because they feel down. The other group turned from happy to sad."

"I think the discrimination is the most stupid thing because we're human it doesn't matter what color you are."

My goal is to encourage an appreciation of other cultures that focuses on the opportunity of living in Orange County where we have such diversity. I anticipate that students will become friends and that some existent barriers will be eliminated.

In my ESL 107 class this Spring I have approached each issue with a focus on cultural diversity. The readings in the class concerned women's liberation, marriage counseling, the curiosity and danger of stereotypes, the roles of men and women in the world in general and in marriage in particular, and, in each case, the class discussion would move from the American attitudes to diverse attitudes in other parts of the world. Constantly, I was emphasizing different and interesting, but not right or wrong. As a culmination activity, I showed two videos dealing with the subject of discrimination in America. The first was Molly's Pilgrim, the second, A Class Divided. Class discussions and papers focused on the feelings of discriminating, and the feelings of being discriminated against. The composition part of the final examination was to respond to the idea of "Don't judge another person until you have walked in his shoes." I asked for the response to include times in the past, present, and future when discrimination had or would touch their lives. The responses seem to reveal a high level of sensitivity to the issue and an awareness of compassion after connecting the feelings on both sides of this issue. Here are some of those responses.

"If you had at least one time that you are discriminated against by somebody, you will not want to discriminate against someone else. I try to say...I used to discriminate against people of different color skin. I used to hate black, Spanish. I used to think that most of them are stupid and lazy...White people were my role model...then one day my car broke down. Whites passed by and called me names, but a black stopped to help me. Since that day I had changed my mind and learned about not discriminating against anyone because of his color."

"In the past when I was in high school in Vietnam, I used to discriminate against the Chinese-Vietnamese because they are very wealthy and they are not native Vietnamese...I still remember I did fight with a Chinese boy in school and said, 'You are Chinese. Go back to China.' When I grew up and came to America I thought what I had done was crazy. Here nobody says 'You are Vietnamese, Go back to Vietnam', but the discrimination in America is hidden softly. Concentrating on my experience with discrimination in the past and present, I can say I won't discriminate against someone else again in the rest of my life because I felt inferior, suffering, and disappointment when I was discriminated against and I don't want to make any other people feel inferior like I did. Moreover, discrimination will be less if your self had experience about it."

"People are discriminating because they don't know how it feels to be discriminated against."

"Seeing the movies in our class last week, I was very moved... I remember my own story when children in South Vietnam laughed at my northern accent...Fortunately, it was over. I don't remember how it was over. It was a terrible souvenir of my childhood. Now I often tell my children not to discriminate against any person for any reason except if they are good or bad."

"I felt that I was discriminated against because of my religion, and I feel that I have a prejudice against anybody who tells me I will do that for you if you do that for me."

"I have changed my mind about discrimination and I think the older I am the less discriminating...I don't discriminate against women and black people any more, but I think I have prejudice against people who used to be criminals. After studying about discrimination, I think I will change my mind and I will change the way I treat them in the future."

"In the past I discriminated... since I have come to the US I have felt discriminated against for several reasons: language, culture, age, etc... I think over myself: I was wrong when I discriminated against people because they had special problems that I didn't understand. Today I know I must kill any idea of discrimination if I want to survive."

"The more education, the less discrimination."

"In the future I would like to see more and more people walking in the other person's shoes before discriminating against them."

To summarize my experience this semester, I would say that both classes seem more aware of words that are judgmental and are more aware of the implications of making judgments about other people. I do feel they have become sensitized to the issues of cultural diversity, and most of them seem genuinely interested in learning more about other people.

CLASSROOM RESEARCH

Caroline Baca-Frye
May 16, 1991
COUNSELING 116

FINAL REPORT

CLASSROOM RESEARCH:

The most recent multi cultural exercise I introduced to my Counseling 116 class was the film, "The Tale of O." This film is a symbolic portrayal of discrimination. The film explores attitudes and behaviors that relate to racial and sex discrimination.

The students wrote a short paper identifying the key messages and themes in the film. After the writing exercise, they participated in groups of four and discussed their reactions to the film and were to identify any belief systems that were challenged. Each group then reported to the class and the students participated in a class discussion.

The student's writing exercises have contained some excellent insights and a few have indicated an intent to modify behavior.

Another recent exercise the class participated in (see attached) was a Cultural Pursuit exercise which contained questions that pertain to a variety of cultural groups. The students enjoyed this because it allowed them to interact with each other. A very involved class discussion followed this exercise.

In a small way, the students have

Based on a classroom research evaluation technique, the students felt they gained some new insights, were motivated to change some negative beliefs and behaviors formerly demonstrated toward ethnic minority groups. They particularly liked the film "A Class Divided" - which seemed to have a powerful effect on some of the students.

I also enjoyed incorporating the multi cultural component into my classroom curriculum.

Thanks for the opportunity.

Classroom Research Final Report

May 15, 1991

Karen Dennis
ESL Instructor/Facilitator

This has been one of the most interesting semesters. Because of my interest in cultural diversity, I worked on multicultural activities that could be added to the classroom. First, I met with Fran Williams who gave me a bibliography to use. Because of her suggestions, I did one project on the study of vocabulary words for Intermediate 3 ESL students that I later presented at one of the Classroom Research meetings. After I finished teaching vocabulary words, I used the 3x5 cards to assess how students like to learn. new vocabulary words. I asked them to write down how they were taught vocabulary words in their countries, what I could do to help them learn, and what they wanted more of. Most students wanted more group practice. From this assessment, I have added more vocabulary activities for additional practice. I used Spencer Kagan's suggestion. After going over 10 words, I have the students turn to a partner and tell him/her the two difficult vocabulary words for them and why. Then they tell the two easy words for them and why. Last week a Spanish student wanted more explanation about the word complexion. She said that in Spanish complexion refers to a "well built physical body." and showed me a picture from the magazine. From that comment, conversations on various uses of complexion followed. Only people who were absent missed the word on a test two days later.

In April I attended the CATESOL (California Association of Teachers of English to Speakers of Other Languages) in Santa Clara. Because of Classroom Research this semester, I attended several sessions devoted to multicultural topics. I attached "Intercultural Interactions: Anticipating and Preparing" to my May 3rd report. From this sheet, I used "Feedback: Giving and Receiving Feedback" to assess how my students received feedback in their countries. I was interested in the fact that in Mexico a check beside the sentence meant the sentence was correct. This is exactly opposite of my method. When I shared this with my students, they were not as interested as I was. They said after looking at the paper, they understood my system. However, now I put x's by the incorrect

sentence instead of a check. Though it doesn't seem to make any difference to my students, I like doing it.

Also at the conference, I attended a session on "Strategies for Developing Culturally Diverse Interaction Styles." One tip was "avoid miscommunication by pre-planning." Teachers are encouraged to develop the skill of **"switching cultural channels" in order to establish an acceptable, non-offensive, productive relationship with people from other cultures.**" (see attachment)

For the last month when we study new vocabulary words, I have brought in fifty or more National Geographic magazines people have given me. The magazine is excellent because of the variety of countries and people pictured. In groups, students are instructed to find a picture that illustrates one of the vocabulary words we are studying and show it to a member of their group. At the end of the time, one picture from each group is shown to the whole group.

For the last assessment this semester, I asked students to rank how they prefer to study vocabulary words:

- _____ using Word Attack on the computer
- _____ using visuals from magazines
- _____ discussing words in the groups
- _____ writing sentences with the word.
- _____ other

Out of 25 students attending, 15 preferred using the computer, 5 preferred groups, 3 preferred writing sentences, and the others didn't hand in a paper. Because the computer allows three at a time, it permits group work, too. Using the words in sentences wasn't as popular as before. The grades on the test have improved, but because the class is open/entry and open/exit, I can't really compare students from the beginning of the semester to the same.

Using multicultural activities in a classroom is a never ending process. I have enjoyed this topic very much.

FINAL REPORT, PORTFOLIO PROJECT, PUENTE PROJECT

English 061, Fall 1990

Classroom Research Consortium

Betty L. Dixon, instructor

PROJECT DESIGN: The project was designed for a Puente Project English 061 class, Introduction to Composition, Fall semester 1991 as a funded project of the Classroom Research Consortium at Rancho Santiago College. The project is described in the attached handout distributed to students at the start of the project.

TARGET GROUP: The Puente Project is an English composition, counseling, and mentoring program for Latino students beginning with English 061 and ending with English 101. Students remain in the program for one-year (two semesters) and receive support that will enable them to successfully transfer to a four-year college or university. The class began in August with 31 students. Thirty students completed the class, all with passing grades. There was one drop. Subsequently 29 students continued the second semester of the program. One student entered another English 101 class because of a scheduling problem. One hundred per cent of those completing the first semester program enrolled in English 101 and continued at Rancho Santiago.

EVALUATION OF THE PORTFOLIO PROJECT: The attached form was distributed to students at the final meeting of the class after the portfolios had been graded and returned. The portfolio grade was the final grade in English 061. The attached Evaluation Form was used to summarize the instructor's evaluation. Also attached are the individual "labels" for each item in the portfolio. All 30 portfolios were submitted on the scheduled date. Of the 30, all were complete except two which were missing one item each. Eight students exceeded the requirements of the portfolio and submitted additional samples of their work. One student submitted three additional writings.

STUDENT RESPONSES TO THE EVALUATION:

1. What was the best thing about the project? Students listed a number of positive comments, but the most frequent was the pride they felt in seeing the portfolios through to completion. One student related that he always carried his "portfolio in progress" with him and constantly showed it to his friends and fellow students who were impressed. In addition students felt the constant revision and rereading of their papers was a valuable way to improve their

writing and work on persistent errors. Two students said it was a "fun project." Still others mentioned the increased responsibility they felt in managing all their papers and finally deciding themselves what to select. One student said she had learned how to "really study" when the course grade depends on student decisions about what to submit for final evaluation. Over half the students indicated the best thing was getting a good grade. Still others mentioned the support and help they received from the instructor, counselor, and other students as they worked together to edit and polish their submissions. Every student had positive comments.

2. What was the worst thing about the project? About two-thirds said there was no "worst thing." Several made no response at all to the question. Of those who did reply, these were the comments: I was not ready to submit it when due, but I did anyway with a result I didn't want; I had a middle of the semester let-down waiting to get it submitted; it was too hard to pick the right ones to submit; I needed more help in assembling the portfolio because I didn't know what was good or bad.
3. In what way did you feel the portfolio helped your writing? Overall students reported that it did help them be more responsible for correcting their papers, getting themselves organized, and forced them to look at their papers many times.
4. Describe your effort in assembling the portfolio. Students had little to say about this. Three said they didn't put much effort into the project. The rest indicated they tried their best.
5. What could be done to improve a project like this? The majority of the class indicated nothing could be done. The project was clear to most of them and managed well. There were these comments: Make students do their work on time for the individual papers; make us read more and write about what we read; provide more individual help. One student indicated she was confused about everything, not just the portfolio but everything.
6. Did you get the grade you wanted on your project? Why or why not? Seven students indicated they were surprised that their grade was as good as it was. The rest indicated that they thought their grade was what they expected. Although three thought it should have been better, they said it was what they deserved and they could have done better.
7. If you didn't get the grade you wanted, what do you feel you could have done to get it? Over half the respondents did not answer this question at all. Of those who did,

most indicated they could have spent more time on their papers, asked for more help. Two said they should have seen a tutor, but didn't. One said the instructor could have provided more individual help. Six said that giving grades on the individual papers would have helped them see where they stood better than comments and maybe that would have helped motivate them to do better.

8. What could the instructor/counselor have done to make the project more successful? Only two students indicated anything at all. The rest felt that sufficient help and clear direction had been given. The two comments were that more individual help should be given and that the teacher's requirements were too demanding and difficult.
9. Would you rather receive grades on each paper rather than just comments? Why or why not? Students had mixed feelings about this issue. Four said they wanted comments and grades. The rest were equally divided between those who wanted only comments and those who wanted to get grades on each assignment. Those who wanted only comments felt, in general, that this was a less intimidating way of correcting papers and less discouraging. Of those who wanted grades, most felt that they would have a better idea of how they were doing and that getting low grades would motivate them to do better and receiving good grades gave them a clear indication of how they were doing. Two also mentioned that they could compare how they were doing with friends in other classes if they received grades.
10. When you submitted your portfolio, did you feel proud of your effort? If not, how did you feel? Did you feel you submitted the very best samples of your work? Why? Why not? Student responses to this question were not always complete, but the overwhelming majority said they were very proud of their effort (reflected also in their response to Question 1 above). Most said they felt they had included their best work, although one indicated she was confused about the entire project. Of those who were not as positive as the majority, most said they felt they had not included their best work because they needed to work on their papers more, or they realized that they had a long way to go to write really well. But for virtually everyone, but a single student, the project was a feeling of accomplishment.
11. Did you feel your final grade on your portfolio reflected your skills? Were you surprised in any way about the grade? Seven students were surprised about the results. They did better than they anticipated. Four were unhappy with their grade and thought they should have done better. Three felt it was their fault they had not received the grade they wanted because they didn't "try" hard enough.

One student was confused about everything as indicated in several of her other responses. The rest indicated they got the grade they expected. Two indicated that they knew grades were not based on how hard you tried or worked, but on skill in writing.

SUMMARY: In brief, students indicated the project was one that made them proud of their accomplishment and for the most part resulted in the grade they hoped to get. Several were even surprised to do better than they hoped. Most indicated that they felt their writing improved over time by having to go back to their papers over and over. Grades were an issue on which students were about evenly divided: half preferring grades on each paper and a final portfolio grade; others preferring only comments on each paper and a final grade. A few indicated they wanted grades and comments on individual papers.

SUMMARY OF INSTRUCTOR COMMENTS

Positive aspects of the project: This semester long project proved to have a number of very positive aspects from the instructor's point of view. Although writing at the developmental level with severely handicapped students like these poses many problems and slow progress, this project did allow students to rework papers many times to try to improve the myriad of errors presented. For about six students the improvement was dramatic, moderate for most of the rest, with about five students failing to show much improvement at all. The fact that all but one student completed the course and submitted portfolios on the due date is nothing short of astounding. The portfolios were all perfectly assembled according to directions. Only two had one item missing. The side effect of having students manage and select their own writing keeping track of all their papers throughout the semester was an accomplishment I had not anticipated and a very positive one. All students received a grade of "C" or better. An excellent record. I had anticipated some incomplete submissions or unrevised papers submitted in desperation. This did not happen, not in a single instance, although some papers definitely did need further revision and still contained significant surface-type errors. When I saw 30 portfolios all carefully assembled and submitted on the due date, I, too, felt a real sense of accomplishment in having "driven" all of them to their final destination. Some considerable interest was shown in the project by several colleagues, the division dean and assistant dean, and the consortium director all who came to see the portfolios during the week they were being evaluated, so I feel this was a very positive aspect of the project.

I feel the overall success of the project was due to the

careful, if rather elaborate, plan I had constructed with complete directions for submitting the portfolio. As a result, it was not difficult to manage and the "labels" attached to each paper at submission made the writings very easy to identify and review. So the management of the project worked out very well, and I would do essentially the same thing in a future project.

Negative Aspects: It would be easy to say there were none, as many of the students reported. However, there were some troublesome areas I would do differently next time. In their zeal to get their papers to a "perfect" stage for final submission, some students submitted their papers to me over and over for correction and comment. This became a tedious and burdensome task. Some papers were "overcorrected" by me blurring the line between the student's work and my own. In the future, I would limit the number of revisions seen by me to one or two at the most. Specific questions could be answered at any time, but not a review of the entire paper. Of the required submissions, a few proved troublesome and disappointing. Students were required to submit a writing other than one required for the class. Hopefully, this would have been a paper from another class or a selection they wrote for their own pleasure, etc. All but a few students chose to submit a minimal piece. Several included a poem of three or four lines or a short paragraph of three or four sentences. This is not the "best sample" of one's work. Much the same occurred in the category of "a piece of writing of your own choice." I would eliminate these areas or be very specific about what could be included. I had hoped that several would include additional writings above and beyond the requirements, but only eight students did.

Evaluation of the student writings is always a difficult task, but I feel that in the future I would give students grades on each paper with the opportunity to revise once for a better grade. Students seemed to be floundering about the quality of their writing and some appeared to feel that they were doing very well because of positive written comments about their content when their papers remained riddled with errors. Striking a balance between "reality" in skill level while not discouraging the student remains one of the most difficult problems in working with deficient students.

The final evaluation of the student portfolios took between 20 and 30 minutes each, so this is a negative situation to be in during the closing days of the semester. Overall, I managed this pretty well because of careful planning, but it is a time-consuming process at a very busy time of the semester.

Writing

PORTFOLIO PROJECT

English 061

Puente Project

Fall, 1990

COURSE EVALUATION---In traditional English classes the instructor usually evaluates students by a combination of averaging grades on formal papers (essays), quizzes/tests, projects, reading assignments, and sometimes even on attendance and extra credit work. While this is certainly one way of assessing student ability in language proficiency, it usually fails to take into consideration students' progress over the semester as all grades are averaged including the ones made at the start of the semester when skills and interest have not yet developed. This is especially true in developmental classes like this one whose stated purpose is to develop skill in writing over a period of time. With this in mind, it makes good sense to look at the skills of students toward the middle and end of the semester rather than giving too much emphasis to early efforts. As students and instructors we would also be wise to acknowledge that not every piece of writing that a writer produces is of great interest or value. Sometimes it can and should be discarded or at least filed away as an attempt that didn't work out too well. After all that's exactly what the meaning of the word "essay" is---an attempt, a try, an experimental effort. All serious writers have drawers of "attempts" that weren't too successful. They usually know it and don't show them around to their friends and publishers. Rather they share and try to publish their best work, which they select from many attempts. Of course, sometimes writers--both students and professionals--are required to produce writing which they would rather not,



but they have to--so they can pass a class, perform on the job, or keep bread on the table. This kind of "on demand" writing is a necessary kind of work that most educated people need to be efficient and fairly good at. So a writer's body of work is, we could say, of two kinds: the type we can be selective about and the sort we simply have to do because of someone else's requirement (or occasionally our own--like the letter we have to write to Dear Auntie Bertha thanking her for the orange necktie she sent for Christmas even though we hate writing letters and we hate the tie and we hate having to find a nice way to still express our "gratitude").

THE PORTFOLIO-----Perhaps a more useful way to assess writing is to periodically gather representative samples of work. These could include both writings students have selected as their best work developed over period of time plus some requirements ("on demand") that the evaluator/reviewer specifies. These representative writings are presented in a prescribed container. We can call this collection a portfolio, much like artists or architects or photographers or even fashion models might present to a prospective employer showing the best of their work and also the range of their skills and abilities. Such a portfolio could be placed in a simple manila folder or a more elaborate container...we'll decide on that later.

Since Puente is not a "traditional" writing program, our method of evaluation is not totally "traditional" either. We will use the assembling of a portfolio as our major tool for your final grade in this class.

THE METHOD-----Here's how we will implement our plan. As you have already discovered, we do a great deal of reading and writing. Sometimes we simply read and write for the sheer pleasure and practice. We often lay aside our "quick writes" and perhaps

go back to them later for further development or just file them away to enjoy rereading at a later time.

(Remember that not all of our writing is carried to completion...it was practice or simply "playing" with a topic to see what the results might be.) From time to time, usually about every other week, your instructor will ask to see a paper that we have seriously been working on. She will offer her comments, mark areas for improvement, and note problems that need attention. She will note that you have done the assigned work on a timely basis. She will not record a letter grade at this point. If you feel you must have such an indicator, say so, and she will give you a grade for your reference. The instructor's comments, however, should be a sufficient indicator of how you did and what remains to be done. These assignments you must submit. When they are returned, you will review them and usually make some revisions. You can ask your instructor to review your "new version" (you should do this) or you can file it away to come back to again....and perhaps again and again. You may want to even do another paper that is a "spin-off" on the one in progress. Who knows what will happen?

CONTENTS-----You may be wondering what will finally go into your portfolio. Here's the list of what we will assemble.

- | | |
|-----------------------------|---|
| <u>Handwritten original</u> | 1. Your first day writing sample (not for a grade, but for your record). |
| <u>WordPerfect</u> | 2. A piece of writing you have developed on your own; not a class assignment. It could be anything: a personal letter, a poem, a story. |
| <u>As submitted</u> | 3. Writing that has been required for another class you are taking. Your reading class might be a good choice. Save these assignments so you can choose your best one for your portfolio. |

- | | |
|-----------------------------------|---|
| <u>WordPerfect</u> | 4. Two of your best assigned papers from your English 061 class. |
| <u>Handwritten or WordPerfect</u> | 5. One piece of "on demand" writing that we have done in this class. |
| <u>Handwritten or WordPerfect</u> | 6. One of your "quick writes." What you feel was your best rapid writing. |
| <u>Blue Book</u> | 7. Your journal (blue book). Not for a grade, but for your record. |
| <u>WordPerfect</u> | 8. One word processing exercise (not a paper for this class) that shows your skill in WordPerfect. |
| <u>WordPerfect</u> | 9. One other piece of writing of your choice which you feel shows your skill...perhaps a unique aspect of your skill. |

Here are some last minute reminders:

1. Save all written work from all your classes and some samples of exercises from WordPerfect so you will have much to choose from.
2. Be sure to label and date all your work, so you can keep track of what you are doing.
3. Use the folder I gave you or some safe place to file your writings. If they get lost, you will be in a crisis situation.
4. Every student must submit a portfolio to complete the class successfully. All required writings must in the portfolio to receive a "C" or better. Specialcover sheets will be provided for each requirement.
5. Start work on your "extra writings" soon, so I will have a chance to give you some input.
6. Plan ahead so you won't be swamped toward the end of the semester.

Here are some important "portfolio dates"

November 15 and 20 ---Begin assembling portfolio in class.

November 27 and 29 ---Finish any final writing/word
processing assignments that go into
your portfolio.

December 4 -----All portfolios submitted.

December 11, 13,-----Portfolios returned.
and the next
week if necessary

Notes:

1. FIRST DAY WRITING SAMPLE, English 061
Format: Handwritten original

Grade/comments:

2. A PIECE OF WRITING OTHER THAN A CLASS ASSIGNMENT
Format: WordPerfect

Grade/Comments:

3. WRITING THAT HAS BEEN REQUIRED FOR ANOTHER CLASS
Format: as submitted for that class

Grade/Comments:

4. TWO OF YOUR BEST ASSIGNED PAPERS FOR ENGLISH 061
Format: WordPerfect

Grade/comments:

5. ONE PIECE OF "ON DEMAND" WRITING FROM ENGLISH 061
Format: handwritten or WordPerfect

Grade/comments:

6. ONE "QUICK WRITE." Your best rapid, unedited writing.
Format: Handwritten or WordPerfect

Grade/comments:

7. YOUR JOURNAL (BLUE BOOK)
Format: Blue Book

Comments:

8. ONE WORD PROCESSING EXERCISE. Not a paper for class.
Format: WordPerfect

Grade/comments:

9. A PIECE OF WRITING OF YOUR CHOICE.
Format: WordPerfect

Grade/comments:

ADDITIONAL WRITING. Extra outstanding samples.
Format: Preferably WordPerfect, but quality handwritten
samples (in ink, one side of the page, lined white
notebook paper, no spiral edges) are permissible.

Grade/comments:

PORTFOLIO EVALUATION (Student) English 061
Fall Semester, 1990
Puente Project
Classroom Research Consortium

1. What was the best thing about the project?
2. What was the worst?
3. In what way did you feel developing the portfolio helped your writing?
4. Describe your effort in assembling the portfolio?
5. What could be done to improve a project like this in the future?
6. Did you get the grade you wanted on your project? Why or why not?
7. If you didn't get the grade you wanted, what do you feel you could have done to get it?
8. What could the instructor/counselor have done to make your portfolio more successful?
9. Would you rather receive grades on each paper rather than comments? Why? or Why not?
10. When you submitted your portfolio, did you feel proud of your effort? If not, how did you feel? Did you feel you submitted the very best samples of your work? Why? or Why not?
11. Did you feel your final grade on your portfolio reflected your skills? Were you surprised in any way about your grade?

Betty Dixon

FINAL REPORT: PORTFOLIO EVALUATION

Name _____

_____ Portfolio is complete

_____ Presented in the prescribed manner with professional appearance.

_____ Work shows evidence of substantial improvement from earlier drafts.

_____ Portfolio was presented on the due date.

_____ Extra work included shows careful preparation.

_____ FINAL PORTFOLIO GRADE

Comments and counseling recommendations at end of English 061 that will help you consider the time and effort that will be needed to be successful in English 101.

FINAL REPORT, GUIDED RESEARCH PAPER
Classroom Assessment Consortium
English 101, Freshman Composition, Puente Project
Betty Dixon, instructor
Spring Semester, 1991

Twenty-nine Latino students were enrolled in English 101 at the time the research paper project began February 28. When the final papers were submitted, April 30, one student had dropped the class. All 28 papers of the remaining students were submitted on the due date.

As noted on the detailed syllabus attached, there were five checkpoints when students were to submit parts of their "papers in progress" for review by the instructor. Other than the final draft and works cited submission, all students submitted other preliminary steps completely except for five who each missed one checkpoint. However, at the crucial last step, the reviewing of the draft and works cited, eight students failed to submit their work to the instructor for review. Four of these students got below average grades on their final papers. The remaining students (4) received a C+, C-, C-, C-. However, there were two D's among the students who went through the process completely. These low grades were not, however, primarily for problems with format, etc. but gross problems with language basics, proofreading, and editing which had plagued these particular students throughout the year.

Final grades of the class were as follows:

A	3
B	9
C	9
D	5
F	2

Overall, I felt the project was quite successful. Certainly to retain 28 students through this arduous course is excellent. To have all 28 papers submitted on time speaks well for the commitment and diligence of the students.

My comments on the "good news" and "bad news" of the papers themselves is contained in the FINAL REMARKS ON RESEARCH PAPER PROJECT, handout for students, which is attached.

As the students worked on their papers and received input from the instructor at each checkpoint, they kept on on-going progress report themselves evaluating the comments of the instructor. I have attached a copy of the Progress Report and several samples of student responses. Classroom assessments throughout the process, revealed that the biggest worry of the students was simply having enough time to get everything done. This was the common chord that wound throughout the project although we allowed nearly eight weeks from start to finish. Despite classroom instruction in format for the paper, I found that many of these students must have one-on-one help in bringing these papers to completion. Following detailed formats, following directions, maintaining "paper" over two months and meeting deadlines all along the way was an experience most of them had simply never had. Writing a paper like this on their own with only classroom instruction in the typical 3-4 week time span allowed in most English 101 classes would be extremely difficult for these students.

At the end of the project, students were given a final evaluation (attached). I have tallied the results and summarized Numbers 4 and 5 on an attachment.

Briefly students felt the time allotted was about right. The hardest part of the paper was getting everything to match: outline with text, notes with works cited, etc. The easiest was the typing of the paper. (All these students were taking WordProcessing.) Six got the grade they wanted; 13 didn't; 4 didn't know. Of those who didn't get the grade they wanted, most said they didn't proof for errors carefully and didn't use their time well. Of those who did get the grade they wanted, all mentioned using the full 7 weeks to work on their paper, meeting deadlines, and working hard. Fifteen said they felt they could do a paper all by themselves after the project, one said he couldn't, and 7 felt they could with some help. Only six had ever done a research paper before; 17 had not. In general students felt that the instructor had done everything possible to help students. One said she should have proofread everyone's papers for them, and one other said she helped him in the beginning, but he didn't get the help he needed later on.

FINAL PERSPECTIVES

With a group of students of whom only six had had previous experience with research papers, it is understandable that this was a challenging project. Such information points up the need to go slowly, get input on what is clear and muddy, what is worrying students, and what plans need to be made for one-on-one help which I feel is a real key to their success. Once over lightly in class will not do it for these underprepared Latino students (nor for most of our students). Two or three weeks to do a paper of this type will not do it either. They need time, monitoring, and coaching. Even then some students are not successful. Proofreading, sentence-type errors (spelling, punctuation, missing words, wrong word, lax attention to accomodating new information) persist. An all-out assault on proofreading needs to be started in English 061 both in the English class and the word processing class in which Puente students are enrolled.

EVALUATION OF PAPERS

I have also attached the evaluation form I use to grade the papers and several examples of evaluations.

PROGRESS REPORT ON RESEARCH PAPER

Your progress report will be submitted with your term paper and is required. After each check with your instructor write a brief statement: your success at the point of checking, revision/corrections that need to be done, etc. This should be a thoughtful evaluation of your status.

Input a replica of this form into your WordPerfect file modified to allow room for your evaluation.

March 7 Submit term paper topics

Student evaluation:

March 12 Library Orientation (indicate that you did attend and what you learned that was new and helpful.

Student evaluation:

March 19 Revised term paper topics (if necessary)

Student evaluation:

April 4 Note card review

Student evaluation:

April 9 Sentence outline

Student evaluation:

April 18 or 23 Drafts with bibliography

Student evaluation:

FINAL EVALUATION: Research paper project

1. Was the time allotted for our project (7 weeks)

___ about right

Any comments: _____

___ too little

___ too much

2. What do you feel was the most important thing you learned. Check one.

___ organizing time and materials

___ doing the actual research (library, notetaking)

___ sentence outlining

___ constructing the Works Cited

___ getting everything to match

___ the actual writing of the paper

___ doing the wordprocessing

3. Look at the list in #2 above. What was the hardest? _____

The easiest? _____

4. Did you get the grade you wanted? ___ Yes ___ NO

If yes, why do you think you got it? _____

If you didn't get the grade you wanted, what do you feel you could have done, to get the grade you wanted. _____

5. List anything you can think of that the instructor could have done to help you more.

6. Do you feel you could do a research paper all by yourself now after going through the entire process ?

___ Yes

___ NO

___ Pretty much, but I might need some help with _____

7. Had you ever done a research paper before the one we did in English 101?

___ Yes

___ NO

STUDENT HANDOUT RETURNED WITH GRADED PAPERS

FINAL REMARKS ON RESEARCH PAPER PROJECT, English 101

EDITING AND PROOFREADING. By far the most prevalent errors were failure to catch spelling and punctuation mistakes, missing words, and typos. Some spelling should have been caught by your spellchecker, but others required careful reading. Many of you are still shaky on the big three: fragments, comma splices, and run ons. There were a few word form errors: possessive case, endings on verbs which change tense, and adjective and adverb forms. There were a number of preposition errors as well, usually with "phrasal verbs" which some call two-word verbs/three-word verbs, like depend on, not depend with, etc. Some of this type of problem occurs when students "translate" from their other language. Reading a lot helps this as time goes on. There are also practice books of two/three-word verbs. Check bookstores. To solve problems like these you can proofread more carefully, read your paper out loud, get someone else to proofread, be sure to use spellchecker, review punctuation rules, read lines of type backwards for obvious errors. One time through usually won't do it. Allow time to proofread several times. Always read both your computer screen and your hard copy. If this was a major problem for you, promise yourself to work extra hard on this aspect of future writing. Mostly it means allowing extra time to review the paper many times and to get "other eyes" to proofread it too. These errors on cover pages and the first pages of your paper send a message to the reader that you have not done careful work. Remember, your writing is **YOU ON PAPER**. Put your best effort forward.

RELIANCE ON SOURCES. Several papers evidenced very heavy reliance on sources. Remember, unless you are using the direct words of your source with quotation marks around them, all other material must be summarized or paraphrased (shortened slightly and put in your own words). Failure to do this is called "plagiarism" and is a serious offense. Just using an in-text note is not sufficient. Because I am so familiar with your writing, I can pretty much tell when the language does not sound like your writing. In college classes, it is not unusual for an instructor to spot check sources which he/she might question by actually pulling the source from the library and going to the page numbers which you have cited. The professor DOES NOT want to find a passage word for word in your paper without quotation marks and in-text notes. So be very careful about this. Many instructors have rigid policies about this (so do colleges and universities). Plagiarism can be a cause for failing students on the paper, in the course, or worse dismissal from the institution. It's considered so serious because it amounts to copying from a source and passing it off as your own work. The other problem it causes, aside from the ethical considerations, is that student writers are not usually skilled enough to "get by" with this because there is a noticeable difference in their own writing and the transition to their word for word "quote." To solve this problem and avoid temptation, be sure to paraphrase and summarize as you take notes. Put any direct quotes in quotes on your cards so you can tell the difference and don't lose track in the drafting process.

DIRECT QUOTES. Save direct quotes for exceptionally well said words, not facts and data; summarize and paraphrase these. Reserve direct quotes for quotations so memorable that you cannot improve or shorten without changing or distorting the meaning you want. For example: "And more brain research isn't going to define..., 'mind' anymore than turning over all the turf in Ireland is likely to turn up a colony of leprechauns." This is memorable and could hardly be said any better. To change it would destroy its meaning and intent.

OUTLINES. Remember at least two subpoints or none. If you have only one, combine it with the major heading.

THE GOOD NEWS

SUBMISSIONS. Of 28 active students, all submitted their papers on the due date. 100% compliance. OUTSTANDING!!

PROCESS. Of 28 active students, all but 8 went through the whole process and met checkpoint deadlines. GOOD, but a lot of heartache would have been saved by full compliance.

GRADES. Of course, ideally an instructor (and students, too) want to receive at least average grades. Our final results showed the following:

21 papers average or above
7 papers below average

STRENGTHS OF PAPERS. Most papers had satisfactory outlines. In general the outlines and papers and sources matched although there were a few students who did not crosscheck carefully. One paper had no notes in the text at all. Format for in-text notes and Works Cited were satisfactory overall, although just about everyone had a few slips in format. Two or three students were way off in both cross checking and format. Topics were interesting, well-defined with good thesis statements, and in general note-taking was accurate and informative with reasonable coverage of the subject in the limited time and length we prescribed.

THIS WAS A LONG AND ARDUOUS PROCESS, BUT YOU HAVE BEEN THROUGH IT. HOPEFULLY, YOU CAN NOW DO IT PRETTY MUCH ON YOUR OWN.

Note: Next fall, the English Department plans to open a Writing Center in D-110. The first semester it will be open at first only to students enrolled in English classes, but any student needing help with writing will be served if time and space permits. I am scheduled to be there from 9 to 10 a.m. on Fridays. So, if you have writing assignments in any of your classes, the Writing Center will be of help to you. Also don't forget the Learning Center tutors. Use them. Also, many of you need continued practice and instruction in basics. English 066, Writing for the Business World, would be a good class for continued practice. It will be offered on Monday night from 6 to 10 p.m. in the fall. Also, in the fall, the bookstore will stock a book called TROUBLESHOOTING. Look under English 062. It is a grammar and punctuation practice book with answers in the back. Some of you could profit by continued practice.

"The more a man (or woman) writes, the more he (she) can write."

--William Hazlett, 1820
English essayist

student handout
May/1991

A COMPARATIVE STUDY OF 38 STUDENTS ENROLLED IN AN
INTERMEDIATE ALGEBRA CLASS

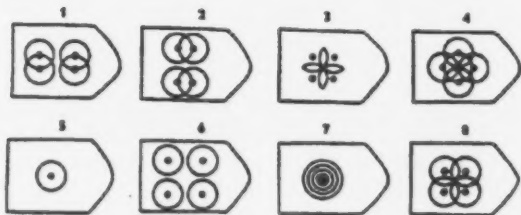
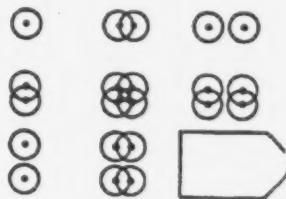
In my thirty some years of teaching algebra there have been questions. Questions that relate to student mastery of the subject that I simply could not answer. I felt that if we could reasonably predict the student who would have difficulty with certain algebraic processing, then at least we would have a chance to explore different teaching techniques that we could hope would prove more effective. Now, there is a new question; one that is quite different. Do Latino students taking Algebra at RSC need a different form of instruction to ensure success? I

decided to test some of this questions. I talked to Dr Trevitt. He recommended a non-verbal test, *The Raven Standard Progressive Matrices*, by J. C. Raven, revised in 1956, and published by The Psychological Corporation, New York. The Raven Test consists of sixty frames; each frame presents a pattern, a missing piece, and eight alternative responses to select the missing piece.

The patterns progress from

simple to complex. The last 12 patterns in set E being more difficult. The test met my criteria that it be non-verbal and provide a comparative score based on a students ability to recognize a pattern. An intuitive process directed my efforts in this direction.

The Raven Test was administered during the seventh week of class. There were 38 students selected for the study. Those selected had been present on the day the Ravens Test was administered and had taken the sixth week class exam. No other



CELL C-10 RAVEN TEST

selection process was employed. The students were given the class hour to complete both types of tests.

After many hours of effort and most helpful statistical coaching by Anthony and Pezzetti I reached a point where the small sample could be analyzed. I was forced to break the students into two groups, that either fell above or below the mean. In this arrangement there were enough student responses in the cells to qualify for χ^2 testing of correlation. After further advice I decided to include the Yates corrected χ^2 test; to eliminate all possible statistical errors due to the size of the sample. The contingency tables have been selected in such a manner as to make intuitive reasoning possible; then correlate them with the statistical results found by employing χ^2 tests.

TABLE I
EXPLANATION OF COLUMN HEADINGS

Column A is the students exam score (based on 100) taken the sixth week of class.

Column B is the students coded response to a problem that required her to differentiate between the words sum and product. The problem began: *find the product of two numbers where* An entry of 1 in the column represents a response clearly showing a correct interpretation of the word product. An entry of 2 in the column represents a response that used the interpretation sum, that is, a + sign, or in three cases a failure to indicate any understanding

Column C is the students coded response to a problem that required him to interpret the meaning of a negative exponent. The problem required him to simplify an expression of the form:

$$x^{-1} + x^{-2} + 3x$$

An entry of 1 in the column indicates at least the student could interpret the negative exponents as $\frac{1}{x}$ and $\frac{1}{x^2}$ respectively. An entry of 2 in the column indicated an incorrect understanding of the negative exponent.

Column D is an indication of the students ethnic heritage. An entry of 1 in the column represents a student with a Hispanic surname. All other students were classified as 2.

Column E represents a code for the student's gender. An entry of 1 indicates a male; an entry of 2 a female.

Column F represents the students percentage score on the Raven Test.

Column G is a code for the students position relative to the class mean, 71.4, based on the exam score contained in column A. The code 1 indicates a score below the mean and a 2 indicates a score at or above the mean.

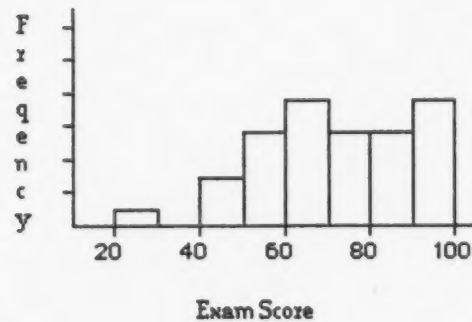
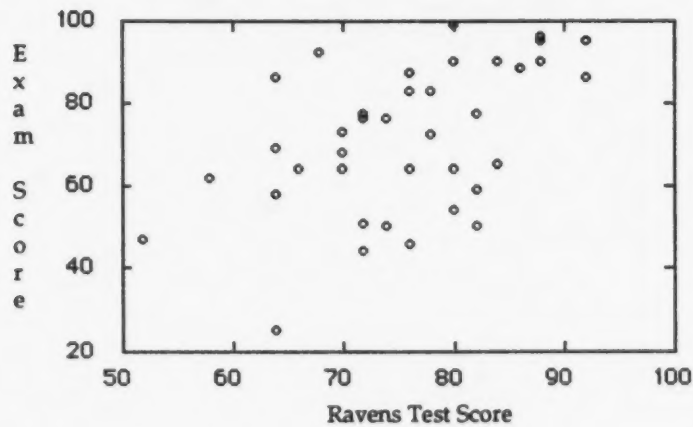
Column H is a code for the students position relative to the class mean, 75.6, based on the Raven Test contained in column F. The code 1 indicates a score below the mean and a 2 indicates a score at or above the mean.

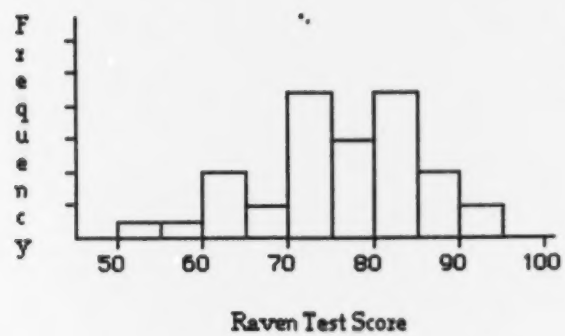
TABLE I

A	B	C	D	E	F	G	H
87.000	1.000	1.000	1.000	2.000	76.000	2.000	2.000
69.000	1.000	2.000	1.000	2.000	64.000	1.000	1.000
65.000	2.000	2.000	1.000	1.000	84.000	1.000	2.000
77.000	1.000	1.000	1.000	2.000	72.000	2.000	1.000
90.000	1.000	1.000	1.000	1.000	88.000	2.000	2.000
90.000	2.000	1.000	1.000	1.000	84.000	2.000	2.000
86.000	1.000	2.000	1.000	2.000	64.000	2.000	1.000
88.000	2.000	1.000	2.000	1.000	86.000	2.000	2.000
76.000	1.000	1.000	2.000	2.000	72.000	2.000	1.000
76.000	1.000	1.000	1.000	1.000	74.000	2.000	1.000
77.000	1.000	1.000	1.000	1.000	82.000	2.000	2.000
83.000	2.000	1.000	1.000	2.000	78.000	2.000	2.000
44.000	2.000	2.000	2.000	2.000	72.000	1.000	1.000
83.000	2.000	2.000	1.000	2.000	76.000	2.000	2.000
58.000	2.000	2.000	1.000	2.000	64.000	1.000	1.000
46.000	2.000	2.000	1.000	1.000	76.000	1.000	2.000
50.000	2.000	2.000	2.000	2.000	74.000	1.000	1.000
47.000	1.000	2.000	2.000	2.000	52.000	1.000	1.000
64.000	2.000	2.000	2.000	2.000	80.000	1.000	2.000
51.000	1.000	2.000	2.000	2.000	72.000	1.000	1.000
86.000	1.000	2.000	2.000	1.000	92.000	2.000	2.000
92.000	1.000	2.000	1.000	1.000	68.000	2.000	1.000
62.000	1.000	2.000	1.000	1.000	58.000	1.000	1.000
99.000	2.000	1.000	2.000	2.000	80.000	2.000	2.000
95.000	1.000	1.000	2.000	1.000	88.000	2.000	2.000
25.000	1.000	2.000	1.000	1.000	64.000	1.000	1.000
54.000	1.000	1.000	1.000	1.000	80.000	1.000	2.000
59.000	2.000	2.000	1.000	1.000	82.000	1.000	2.000
72.000	2.000	1.000	1.000	1.000	78.000	2.000	2.000
73.000	1.000	2.000	1.000	2.000	70.000	2.000	1.000
50.000	2.000	2.000	1.000	1.000	82.000	1.000	2.000
68.000	2.000	2.000	2.000	2.000	70.000	1.000	1.000
90.000	1.000	1.000	2.000	1.000	80.000	2.000	2.000
64.000	2.000	2.000	1.000	1.000	66.000	1.000	1.000
64.000	2.000	2.000	2.000	2.000	76.000	1.000	2.000
64.000	1.000	2.000	1.000	2.000	70.000	1.000	1.000
96.000	2.000	1.000	2.000	1.000	88.000	2.000	2.000
95.000	1.000	1.000	1.000	1.000	92.000	2.000	2.000

LINNEAR CORRELATION BETWEEN EXAM SCORE AND RAVEN SCORE

The Class test and Raven Test scores seem to have a strong linear relation as shown by the graph. There Pearson Correlation Coefficient is .584. With 38 cases studied this represents a confidence of better than 1%. The equation of regression is given by Exam Score = 0.484 times the Raven Test Score + 43.75. The Exam Score mean was 71.4 and the Raven Test Score mean was 75.6. The standard deviations were 17.8 and 9.25 respectively.





Contingency Tables

The results of various forms of pairings are expressed in the following contingency tables.

	EXAM SCORE	
	< MEAN	> MEAN
LATINO SURNAME	11	13
OTHER	7	7
	18	20

Pearson χ^2 value is .062. Conclusion: There is very probably no reason to believe that students in this class performed better because of their surname.

	PATTERN SCORE	
	< MEAN	> MEAN
LATINO SURNAME	11	13
OTHER	6	8
	17	21

Pearson χ^2 value is .032. Conclusion: There is very probably no reason to believe that one group of students in this class recognized the patterns on the Raven Test better than another based on a difference in surname

	NEGATIVE EXPONENT	
	RIGHT	WRONG
LATINO SURNAME	10	14
OTHER	6	8
	17	21

Pearson χ^2 value is .005. Conclusion: There is very probably no reason to believe that one group of students in this class performed better in manipulating a base and negative exponent better than another based on a difference in surname.

	SUM OR PRODUCT	
	RIGHT	WRONG
LATINO SURNAME	14	10
OTHER	6	8
	20	18

Pearson χ^2 value is .849. Conclusion: There is very probably no statistical reason to believe that one group of students in this class correctly interpreted the word product better than another based on a difference in surname

	RAVEN TEST	
	< MEAN	> MEAN
< MEAN	11	7
CLASS EXAM		
> MEAN	6	14
	20	18

The results shown in this table support the evidence of the regression analysis. Here we can see that there is a very strong correlation between success on the Raven Test and the classroom test administered in the sixth week. The χ^2 value was 3.71 which gives it a significance at very nearly the 5% confidence level. The Yates figure is .08 which supports the correlation at 11%.

	SUM OR PRODUCT	
	RIGHT	WRONG
< MEAN	7	11
CLASS EXAM		
> MEAN	13	7
	20	18

The question on the class exam correlated strongly with the students position relative to the mean score. Here we see that seven students missed the correct meaning of product and substituted sum when there overall exam grade placed them above the mean score. The χ^2 value for correlation was 2.59, with only a 10.7% chance that it was other than a true correlation. The Yates statistic for the correlation is 0.167 with a 20% chance that this is not a valid correlation.

	SUM OR PRODUCT	
	RIGHT	WRONG
< MEAN Raven Test	12	5
> MEAN	8	13
	20	18

This question on the class exam correlated inversely with the students position on the Raven Test relative to the mean score. Here we see that 13 students missed the correct meaning of product and substituted sum when there overall Raven score placed them above the mean score. This seems to indicate that confusion or misinterpretation of the word product does not correlate with pattern recognition as exemplified in the Raven test. The χ^2 value for correlation was 3.98, with only a 4.6% chance that it was other than a true correlation. The Yates statistic for the correlation is 0.692 with a 10% chance that this is not a valid correlation.

	NEGATIVE EXPONENT	
	RIGHT	WRONG
< MEAN CLASS EXAM	1	17
> MEAN	15	5
	16	22

Here we see a very high correlation with the students position relative to the class mean on the sixth week exam and their ability to correctly interpret the meaning of a negative exponent. The χ^2 value for correlation is 18.74 with a 0% probability this is due to chance.

	NEGATIVE EXPONENT	
	RIGHT	WRONG
< MEAN Raven Test	3	14
> MEAN	13	8
	16	22

The correlation with the students ability to correctly interpret the negative exponent and his relative position on the Raven Test is very strong. The χ^2 figure is 7.54 with only a 0.06% chance that this by chance. The important result is the difference in correlation with the word product and the incorrect interpretation of the negative exponent.

	NEGATIVE EXPONENT	
	RIGHT	WRONG
MALE	11	9
FEMALE	5	13
	16	22

Now to consider the gender of a student to determine if there is any possible effect on the seeming contradiction of the previous correlations. In this grouping we see that only 5 of the female students correctly interpreted the negative exponent as compared to 11 of the males. The male proportion answering correctly was better than half as where the females responded correctly in about one-third of the cases. χ^2 value is 2.88 with probability 0.090 that this could be achieved by chance.

	SUM OR PRODUCT	
	RIGHT	WRONG
MALE	11	9
FEMALE	9	9
	20	18

In response to the question requiring the student to differentiate between the words sum and product in the solution to a problem we see a perfectly normal distribution. Each cell contains about half of the gender group. There is no statistical reason to believe that this is not a normal distribution. χ^2 value 0.095.

	CLASS EXAM	
	< MEAN	> MEAN
MALE	8	12
FEMALE	10	8
	18	20

Grouping the students by gender and their position relative to their mean score on the class exam reveals no significant deviation from an expected ratio. The males fared about as well as the females. The χ^2 value is 0.920.

RAVEN TEST		
	< MEAN	> MEAN
MALE	5	15
FEMALE	12	6
	17	21

The results shown in this tabulation reveal a significant division in the females ranking compared to the males. Exactly three-quarters of the males placed above the mean while two-thirds of the females scored below the mean. the χ^2 value is 6.653 with a .010 probability that this was achieved by random chance. In order to determine if there was a significant difference in the means of the two genders on the Raven Test a τ test was run, grouping by gender and score on the Raven Test. The mean female score was 71.2 and the male 79.6. The τ value was 3.144 with a probability of .003 that this is by chance.

INTRODUCTION

The underlying concepts of classroom-based research emphasize the need for and desirability of continuing dialogues between instructors and students. The inherent diversity (cultural, age, learning style, levels of preparation, goal) of student populations, particularly those populations in the community college environment, demands diligence on the part of instructors in the pursuit of mutual understanding. Classroom-based research centers on two major themes: checking of understanding of class content and examining the perceptions of students regarding the logistics of classroom organization, techniques, and learning activities. Instructors' perceptions of appropriate, efficient, and satisfying teaching techniques and styles may not be congruent with the needs or perceptions of their students. The study described below is a pilot study that will serve as a point of departure for future research. It grew out of the following:

- 1) The continuing need to determine what types of classroom activities/behaviors provide the best learning opportunities for students.
- 2) The desire to discover how much "ownership" exists in a class and how to foster a cooperative/collaborative learning experience in particular classes.
- 3) Specific needs, perceptions, and favored styles of specific student populations, particularly the "re-entry" students (those who have not entered college directly from high school).

METHOD

The attached questionnaire is the result of a series of index-card type assessments throughout the Fall, 1990 semester. These mini-assessments consisted of simple questions concerning what students liked about classes they have had and what they disliked about classes they have had. Other post-exam assessments were conducted concerning students' perceptions of exam format, exam results, and study habits. These small assessments demonstrated the desirability of administering a more complete survey that allowed for students to express a wider range of perceptions. The survey included here provides the basis for the preparation of a more quantitative, forced-choice survey to be administered widely and which will utilize constructs uncovered here. The more broadly-based, quantitative survey will form future research projects.

The attached survey was administered to 5 college-level classes. Two of these classes were from Chapman College and three were from Rancho Santiago College, Santa Ana Campus. Four were speech communication classes and one was a business administration class. There were 60 respondents with 27 of the respondents fitting the category of "re-entry" student (operationalized as responding "no" to the question asking if the student had entered college directly from high school).

Marilou Morris & Melinda Womack

Age group: 18 - 25 _____ 31 - 35 _____ 41 - 45 _____
26 - 30 _____ 36 - 40 _____ 46 - 50 _____
Over 50 _____

Gender: Male Female

Did you enter college immediately after high school? Yes No

If you waited to enter college, how long did you wait? _____

1. What kinds of classroom activities make your learning easier? (Check as many as apply)

lecture _____ small group projects _____
discussion _____ individual oral report assignments _____
videos _____ term papers with research _____
Other (specify) _____

2. How do you absorb textbook material the most efficiently?

3. Are there other sources of written material you would like to see used in addition to or instead of textbooks? What kinds?

4. Indicate your preference for exam formats: (check as many as apply)

several small exams _____ many quizzes on text _____
take-home exams _____ objective exams _____
essay exams _____ questions up front, write in class _____
other (please specify) _____

5. Which kinds of exams do you study the most for?
6. Which kinds of exams best reflect your knowledge of the material?
7. List some things that instructors do that create obstacles to your learning and having a worthwhile class experience:
8. List some things that students do that create obstacles to your learning and having a worthwhile class experience:
9. List some things that instructors have done or can do to assist in your learning and having a worthwhile classroom experience:
10. List some things that students have done or can do to assist in your learning and having a worthwhile classroom experience:

11. What kinds of semester-long projects have you participated in that have provided a satisfactory learning experience: (If you have never been assigned a semester-long project, please indicate. If you have been assigned semester-long projects that were unsatisfactory, please explain why they were unsatisfactory)

12. You are registered in a 3-hour evening class. Please describe an ideal division of time for this class.

13. Think back to an especially memorable, positive class experience that you have had. Without mentioning names or specifics, indicate what exactly caused this experience to be so satisfying:

14. Without mentioning specific classes, describe your "pet peeve" in your educational experience:

RESULTS AND TENTATIVE CONCLUSIONS

Quantitative Questions

Lecture/discussion was preferred form of instructional delivery. Videos were not highly rated. Small group activities were preferred over individual oral assignments.

Students were quite forceful in their preference for several small exams during a semester. This was true for all groups. Essay exams were preferred more by re-entry students, and other groups preferred objective-type exams.

Instructor Involvement Questions (Reflects strongly voiced themes)

Positive, encouraging things that instructors do in class: (questions 9 and 13)

- review sheets/handouts/study guides
- be human/share life experience
- review class material
- share ideas/encourage open discussion
- let students know how they're doing/ask for feedback
- let students formulate their own opinions
- organized class
- see students as individuals/cultural awareness of instructor
- enthusiasm/energy
- give examples
- learn students' names
- be available outside of class
- group work

The above list reflects both "re-entry" and other students. The themes expressed by both groups were nearly identical.

Negative, discouraging things that instructors do:

- Tangents/goes off the subject/talk to themselves
- condescending/treat students as children/adopt a superior attitude
- boring/not enthusiastic
- discourage open questioning/ don't consider students' point of view
- not organized/deviates from class plan
- goes to fast
- gives obscure questions on exams

Student Involvement Questions

Positive, encouraging, helpful things that other students do:

- study groups/compare notes/discuss things outside of class/share ideas
- participate in discussions/sharing opinions with class/present all opinions
- help students who are behind or have missed class

Negative, discouraging, obstacle-creating things that other students do:

- interrupt/act like high school/disrespect for instructor
- grind an irrelevant topic into ground/dominate class/ pursue minor issues

Negative things that other students do (continued):

come to class unprepared
apathy/lack of preparation/not reading material for discussions
absent/late/need to be brought up to speed because of absence or tardiness
talking, joking to other students, disruptive behavior *
not appreciating learning for its own sake*

*These were particularly stressed by the re-entry students.

"Pet Peeves" (reflecting multiple responses)

late students
rude, critical instructors
unenthusiastic, egotistic instructors
boredom
wasting class time (by anyone)
instructors who do not permit questions
all lecture classes
students who are not serious
instructor doesn't try to understand me

DISCUSSION AND IMPLICATIONS FOR FURTHER STUDY

The two recurring themes in these initial findings relate to instructor openness in the sense of encouraging a classroom environment that enables all students to express their opinion in a discussion that stimulates critical examination of the course content. Students appear to be concerned that the instructor view them as humans, and individuals who have unique perspectives and experiences. Structure and organization are important to students, and there is a strong negative feeling for instructors who deviate from the subject or who permit students to do so. Obviously, the balance between free and open discussion and maintenance of efficient class time use is not an easy one. Classroom research discussions often deal with this issue.

It is interesting to note how strongly a student's classmates impact his/her learning satisfaction. Students want other students to be prepared, participate, share ideas, and not waste time. There seems to be a desire to create a classroom community experience. Classroom research techniques will encourage this.

The limitations of this pilot study include:

narrow scope of class type surveyed (i.e. speech classes may attract "talkers")
lack of questions that pinpoint a student's culture (may impact preferred techniques)
lack of sufficient differentiation to identify "re-entry" students

Future studies will attempt to quantify the constructs obtained by the pilot study by designing some forced-choice questions. Further analysis of the data will examine gender and cultural differences, class type differences, and educational goal considerations.

RANCHO SANTIAGO COLLEGE

17th AT BRISTOL
SANTA ANA, CALIF. 92706
(714) 667-3000

DATE: Dec. 13, 1990
TO: MaryAnn Anthony
FROM: Charlene Pearson
SUBJECT: Update on Classroom Research Project
and Final Report, 1990

The following is an updated report on "Critical Thinking Assessment" at Rancho Santiago College with a final analysis of students critical thinking skills level. This study was to determine how well students already do critical thinking. Using SPSS software, correlation coefficient studies were done (providing a measure of strength of association between 2 variables). Using chi-squares to determine differences among the groups, significance was set at $p \leq .05$ level. Analysis proceeded stepwise, first comparing students in areas of sex, then age, ethnicity, and educational level. No significant differences were found.

With the sixty-four students who participated from two Counseling 116 courses, there was a fairly even distribution of males and females.

The ages ranged from 18 to 50 with 18-22 representing 70% of the students.

The ethnic breakdown consisted of 48% Hispanic, 23% White, 21% Asian, 6% Black, and 2% other.

Ninety-four percent had a high school diploma; ninety-five percent had completed 0-29.5 units.

Students educational goals ranged from obtaining both the BA/S and AA (40%), AA/AS only (23%), undecided (16%), to other (21%).

It is concluded that there was no significant difference found between critical thinking skills level in this sample group and sex, age, ethnicity, completed education, or educational goals.

To make the test results more meaningful, it was necessary to relate the scores to specifically defined normative groups. Although these norms were not of large populations, they do provide a reference for comparisons. Primarily, norms for students in junior and community colleges were used.

Consistent when compared to representative norms in both the Watson-Glaser and Cornell assessment instruments, the study group fell considerably below the norms of other college students from similar educational institutions. When cross tabulations were done, it was found that 73.4% of the students scored below the 50th percentile on the Watson-Glaser while 85.9% scored below the 50th percentile on the Cornell Critical Thinking Assessment.

In conclusion, these assessment instruments measured the extent to which students had mastered certain critical thinking skills (i.e. induction, credibility, prediction and experimental planning, fallacies, deduction, definition, assumption identification, argument evaluation, and conclusion-logically-following-beyond-a-reasonable-doubt). The ability to think critically is generally recognized as an important and pervasive educational objective. Analysis of data tend to indicate that these rather new students to community college are ill-prepared for critical thinking in higher education.

It was not the intent of this study to find fault but rather to explore possible reasons and work towards removing barriers to students growth and success in community college. Based on findings, it appears the study group had not developed their critical thinking skills at a level that would enhance their student learning and success in a higher education institution.

Recommendations are made to further investigate and provide classroom research on critical thinking assessment. Assessment and research can improve student learning and instruction by raising questions about the nature of instruction, providing feedback to instructors (i.e. different instructional strategies), and assisting instructors to refine goals and standards.

Further, it may be that students lack experience in differentiating between merely learning what is in a text and thinking through the issues under discussion. Students' critical thinking skills should be enhanced by instruction which re-enforces preparatory study of the reasoning operations characteristic of the various disciplines; by instruction which focuses explicitly on the techniques of critical and constructive thinking.

At the college level students should be able to reason inductively and deductively such as when criticizing or constructing arguments. By employing deductive reasoning patterns, they can proceed with certainty from true premises to a true conclusion. Good inductive reasoning enables them to select conclusions which are not certain but have the best probability or strongest evidence of being true.

In closing, the support for this special project has provided me the opportunity to continue research in critical thinking - which has been concerned not only with critical thinking testing, but also with conceptualizing critical thinking and with critical thinking instruction and curriculum development. Further research (student pre and post testing) is being planned for the Spring, 1991, to determine possible student critical thinking development.

Thanks go to MaryAnn Anthony, Greg Pezzetti, Suzi Russell, Frank Black, Bob Putman, and Robin Brooks for their assistance.

SUMMARY OF STUDY GROUP PROJECT AND CLASSROOM RESEARCH
by Myrna Sorensen
December 10, 1990

In this project study groups were formed for each of two classes in Math 140, College Algebra. Student facilitators attended my class sessions and met with me twice a week for training and discussion of the types of problems to be included on worksheets used in the study groups. One group met with Austin Hui on Mondays and Wednesdays from 1 - 3, and the second group met with Doug Grabhorn on Tuesdays and Thursdays, 12:30 to 2:30. I also tried some different techniques within the class and these were reinforced in the study groups. Classroom research was used to assess these techniques and to determine the needs of the students as we went through the course. The facilitators also used classroom research techniques to determine how students were doing.

The grades in these two classes have been considerably better than the same class with the same text and similar tests in previous semesters as shown in the chart below:

Semester	Test 1 Average	Test2 Average	Test 3 Average	Test 4 Average	Number taking Test 1-Test 4	% loss
Fall 88	71	58	64	75	26	38%
Spring 89	81	64	62	67	10	0%
Fall 89	79	69	74	85	42	43%
Spring 90	80	73	64	72	47	47%
Fall 90 9:00	75	73	80	84	43	34%
10:00	80	76	79	83	45	20%

Eleven students who attended most of Austin's sessions have an average on four tests and four assignments of 86% compared to 82% for the two classes. Only one student attended Doug's sessions regularly and she has an average of 102%.

I have felt the study groups were very effective, especially Austin's. Student comments have been favorable. Enthusiasm has been high in the class and I have benefitted from my work with Austin and Doug as they have shared their ideas with me and indicated the problem areas for the students. Doug's group has been discouraging as few students have attended. Midsemester his group was changed to a drop-in group and was opened to another Math 140 class. (Student responses on 3x5 cards indicated they would use the group on this basis.) Still, attendance has been low. I believe this was due to Doug's inexperience and the fact that his math studies took place several years ago in an engineering environment where perhaps stress was on applications rather than theory. He knew the math, but was not readily able to communicate it to the students. Comments given to me informally were that "He confuses me". He worked hard and improved considerably throughout the semester. One student attended before the first and fourth tests and earned a B and a C respectively. When she did not attend, her grades were both F's. Similar grade slumps happened with two other students. Due to responses on 3x5 cards, both groups began

devoting some time to homework questions.

I gave a questionnaire (attached) after the fourth test to determine the effectiveness of study groups and the special projects which I tried this semester. I also tried to discover if there had been any change in student attitude and study habits and their perception of their accomplishments this semester.

A summary of the results of 59 questionnaires is given here along with my reaction to each item. A complete summary is available on request.

Of the twenty-one who participated at least once in a study group, all said they would attend a study group in a different course. Also, all indicated they thought that attending the group raised their grade. Here are some comments on what students liked most about study groups: "It was fun learning math." "The personal interaction and individualized help." "Working harder problems helped me do homework more easily." "I learned more in study group than I did in class." "Being ahead of class." "Great test reviews." "My math skills started to take a geometric sequence." Some comments on what they liked least: "Being ahead of class." "Too little time, especially for homework questions." "They take too much time." "I had to pace with other students." "Should not have any attendance rules."

I would highly recommend continuing such groups if funding can be found. Care should be taken to use facilitators who have previously shown their ability to communicate mathematics and have shown good academic progress in their current math classes. Although groups that are closed (attendees commit to regular attendance), seem more effective, I would also recommend having at least some open groups, in order to serve a wider population.

I found that study group participants also asked more questions in class and used the Math Study Center for working on homework difficulties. They worked well in small groups while there. For these students there seems to be an excitement when working with math and less frustration.

Prior to the beginning of the semester, I sent a letter to each student welcoming them to the class, announcing the availability of study groups and some of my expectations for the class. Fifty students remembered getting the letter and 48 thought this was a good idea. They indicated that it gave them a good feeling and they liked to hear my expectations. Some comments were that I cared, was looking forward to the class, was prepared and was serious.

After Test 2, I showed the students a chart indicating for each letter grade the average attendance, Study group hours, Math Study Center hours and homework grade for students receiving that grade. The first time, students were asked to indicate one thing they would do to improve or maintain their grade. Forty seven students said they liked this and 6 did not, citing that they took too much time. After the first time I did this, I noticed that attendance improved and Math Study Center Hours increased, so I feel the charts provided motivation and were worth the time.

I had the students rate six cooperative learning tasks and one special lecture. The results are listed below.

Special activities rated on scale 1 to 5, 5 being best:

			Average Rating	Use again?	
				YES	NO
1)	First day: listing and organizing types of numbers	9:00 10:00	3.5 4.0	18 25	3 7
2)	Equation/Inequality Strategies (Given with a lecture)	9:00 10:00	4.0 4.2	20 28	1 2
3)	Group follow up to 2: Putting a list of problems in categories	9:00 10:00	4.1 3.8	18 27	3 3
Comment: Not enough class time given to be effective. Directions could be clearer.					
4)	Group: Graphing lines and "discovering" meaning of m and b in $y = mx + b$	9:00 10:00	4.2 4.4	17 30	2 1
5)	Group: Graphing parabolas and "discovering" meaning of h, k and a in $y = a(x - h)^2 + k$	9:00 10:00	4.2 4.4	22 29	0 2
6)	Class experiment: Using table of values for a rational (fractional) function and "discovering" asymptotes	9:00 10:00	3.1 3.9	14 26	8 4

Comment: Needs to be revised to be more effective.

7)	Group: Word problems using e on a calculator.	9:00 10:00	4.0 4.0	16 28	4 1
----	---	---------------	------------	----------	--------

I felt each of these were worth the extra time because I referred to them later in the semester. This made teaching some new concepts, such as exponential and logarithmic graphs, take less time. Also, I felt these developed a model that students could use for future learning. Their comments and ratings are favorable, but give me ideas of some things I can change.

The ratings on attitudes, study skills and math accomplishment were about the same on the preclass questionnaire and the questionnaire given on December 6. However, when asked how each of these changed, the students cited some examples worthy of sharing.

Thirty students indicated their attitude was better or unchanged. Six said they still did not like math very well but felt better able to cope with it. In study skills students indicated they improved on keeping up with daily homework and using the Math Study Center.

As one would expect, most said their math knowledge had improved. One

student said, "I actually understand what I am doing a great part of the time." Others cited increased problem solving skills and better understanding of graphs and how to use a calculator.

In conclusion, the classroom research techniques have helped me to be more flexible and positive. I was quite impressed to find that even A students were not satisfied with their grade after the second test. I thought they had done quite well but complimented them on their desire to get higher grades or, in some cases, higher A's. In general, more students used the math study center and sought me for help than ever before. I think this is because they perceived themselves as important in the class and to me and capable of succeeding. Also, I believe just asking students questions about attitudes sometimes has the side benefit of forming better attitudes. Asking, "What did you learn," reinforces that learning. Study groups not only enhance learning but allow students the opportunity to enjoy mathematics. I have also enjoyed hearing ideas from other teachers this semester.

Name _____

Myrna Sorensen

On a scale of 1 to 5, 5 being the best,
how would you rate yourself

in your ATTITUDE toward math? _____

in your MATH STUDY SKILLS? _____

In your current ACCOMPLISHMENT in math? _____

Used
Dec. 6, 1990

Please answer the following for this semester:

How has your attitude changed toward math?

How have your math study skills changed?

How has your math knowledge changed?

About how many math study group sessions have you attended? _____

If you attended a math study group, please answer the following:

What did you like about the study group?

What did you dislike about the study group?

Would you attend a study group again in another course? _____

How do you think the study group affected your grade? _____

Which study group did you attend?

MW 1-3 _____

T TH 12:30-2:30 _____

Both _____

Comments:

Used Dec 7,
1990

Please rate each of the following activities on a scale of 1 to 5, 5 being best also, indicate if you feel this activity should be used again. If you were absent for this activity, please indicate NA.

	Rating (if abs., put NA)	Use again?
1) First day: Organizing Numbers (real, rational, etc)	-----	-----
2) Equation/inequality Strategies (Given with lecture)	-----	-----
3) Group follow up to 2: Putting a list of problems in categories	-----	-----
4) Group: Graphing lines and "discovering" meaning of m and b in $y = mx + b$	-----	-----
5) Group: Graphing parabolas and "discovering" meaning of h, k, and a in $y = a(x - h)^2 + k$	-----	-----
6) Class experiment: Using table of values for a rational (fractional) function and "discovering" asymptotes	-----	-----
7) Group: Word problems using e on calculator	-----	-----

Did you receive the welcome letter before attending class? -----

If so, was this a good idea? ----- Comments?

Did you like the charts used after each test showing attendance, help center hours, study group hours, and homework by grade? -----

Comments?

CLASSROOM RESEARCH FINAL REPORT

by

Terry Tomlinson, High School Subjects Instructor

May 10, 1991

As we end another semester of classroom research projects, I would like to summarize the results of my three classroom assessments and comment upon the value of this semester's work. My first assessment was a direct result of my first semester's work in classroom research. Last year I found out that a majority of my students will not ask for help even if they are completely lost. Most of them suggested that we start small cooperative learning groups to facilitate more individualized instruction and a forum for asking and answering questions. We listened to the students feedback and started small learning groups Fall Semester. For the Spring Semester the majority of the comments from the students regarding the effectiveness of the small learning groups are positive. I have made the commitment to continue to evaluate the effectiveness of the small groups by an ongoing evaluation process with a standardized evaluation form.

The second assessment dealt with the physical setting and setup of the High School Subjects classroom. Specifically, I asked about the lighting, ventilation, noise level, and seating arrangement. I found out the majority of the students are generally happy with the physical setting in the classroom. The noise level issue is still a cause of concern for some students and the instructors. I have tried carefully to enforce the "quiet-study area" policy in our classroom. The external noise is a major concern for the night classes. When the windows are open, we pickup all the neighborhood noises in our classroom. I have proposed to administration a short-term solution to that problem. I have received a positive response from administration, and they are exploring the possibilities of adding adequate air conditioning for the entire school.

In my third assessment, I wanted feedback from students regarding our current textbook checkout system. What I found out is that most of our students understand our system and most of them follow it. But, some students responded that they do not sign out for the textbooks (using a type of honor code) as they should. When the books are not signed out properly, the student either intentionally or unintentionally walks out of the classroom with the book. With these results, we have made an immediate change in our textbook checkout policy. The instructional assistant is assigned to sign out the books to each student. When the student finishes using the textbook, he/she has to give it back to the instructional assistant. Our new system has been working well. It does not take anymore time than the previous system, but it gives us better control and accountability.

I know the value of classroom research in my program. I have assessed three real issues that are important to my instructional program. I have received some very useful information that I can directly use in my classroom to improve the learning environment and classroom management. I appreciate the opportunity to be associated with the classroom research project and I would like to continue my association with it next year.

APPLICATION FOR PARTICIPATION

APPLICATIONS FOR CLASSROOM RESEARCH PROJECTS

The RSC Classroom Research Consortium Project is now accepting applications from full-time RSC faculty members who are interested in participating in project activities in Fall 1990. Funds are available to provide stipends for faculty who become trained in the use of:

CROSS-ANGELO ASSESSMENT TECHNIQUES -- *methods an instructor can use quickly, easily, and non-threateningly in the classroom to determine if students are learning what the instructor is teaching*

COLLABORATIVE LEARNING -- *structured group assignments for students to do in class and out, with instructors and students assessing outcomes of these assignments to gauge learning accomplishments*

LEARNING LOGS -- *a method of note-taking in which students use a split page notebook to record on one side notes taken from class lectures or text, and on the other side attempt to synthesize the notes, pose questions arising from the lecture, and discover applications in real life of course material. Instructors collect the learning logs periodically to comment back to the students in writing.*

MULTI-CULTURAL CURRICULUM INFUSION -- *taking cultural biases out of current texts and course syllabi.*

Two additional stipends are available to faculty who wish to do "traditional research" on some aspect of classroom learning.

Apply now to participate in this exciting project!

APPLICATIONS DEADLINE: APRIL 17, 1990

Do you ever wonder if your teaching methods are reaching your students?

Have you wanted to try "something new" in your classroom?

Do you have a specific topic relating to classroom teaching you would like to research?

Would you like to be on the "leading edge" of teaching methodology?

The RSC Classroom Research Consortium Project is now accepting applications from full-time RSC faculty members who are interested in participating in project activities in Fall 1990. Funds are available to provide stipends for faculty who become trained in the use of

- 1) Cross-Angelo classroom assessment techniques
- or
- 2) collaborative learning techniques
- or
- 3) learning logs
- or
- 4) multicultural curriculum infusion

and use these techniques in class.

In addition, two stipends are available to faculty who wish to do "traditional research" on some aspect of classroom learning; preference in selecting proposals to be funded will be given to projects addressing the diverse student population we have at RSC.

Participants in the project will meet as a group several times during the fall to discuss project experiences and will submit brief reports.

An application form is given on the next page. For more information, please attend an informal meeting on:

Wednesday, March 28 from 1-2pm in U-204C

or

Thursday, March 29 from 1-2pm in A-47

or write a note to Mary Anne Anthony.

RANCHO SANTIAGO COLLEGE
CLASSROOM RESEARCH APPLICATION

NAME: _____

DEPARTMENT: _____

LOCATION: _____ PHONE: _____

COURSES YOU WILL TEACH IN FALL 90: _____

ACTIVITY FOR WHICH YOU ARE APPLYING: (check one)

_____ Cross-Angelo classroom assessment techniques

_____ Collaborative learning

_____ Learning logs

_____ Multicultural curriculum infusion

OR

_____ Other classroom research. Describe on the back of this page your topic, population of interest, planned activities, and expected outcomes.

Please return completed application to Mary Anne Anthony's mailbox. DEADLINE: APRIL 17, 1990. Applicants will be notified whether or not they have been selected after May 1, 1990.

SIGNED _____

Date: November 8, 1990
To: RSC full-time faculty
From: Mary Anne Anthony
Subject: Classroom Research Opportunities

Applications are now being accepted for participation in the Classroom Research Consortium Project's Spring 1991 activities. Revitalize your teaching and earn a stipend as well! Spring 1991 activities include:

1. **Cross-Angelo classroom assessments** - You will attend a training workshop January 14 and 15 ("If You Can't Understand Me, Raise Your Hand!") and then apply what you learn in your classroom. You will also attend monthly meetings with other project participants.

Stipend amount = \$250.00

2. **Teaching and Learning in the Community College** - You will attend a class Wednesday afternoons February 20 through May 15 at Rio Hondo College in Whittier, just off the 605 freeway. The class will be taught by Dr. Tom Angelo, director of the Center for Teaching and Learning at CSU Long Beach, and graduate credit through UCLA extension is available. The primary purpose of the class will be to help both new and experienced community college faculty improve their students' learning by increasing their teaching effectiveness. You will share your experience with your RSC colleagues at a flex workshop in 1991-92.

Stipend amount = \$1000.00

3. **Collaborative Learning, Learning Logs, Multicultural Curriculum Infusion or Computer Assisted Instruction** - If you have not already been trained in Cross-Angelo classroom assessment, you will attend a training workshop January 14 and 15 ("If You Don't Understand Me, Raise Your Hand"). You will attend an additional training workshop in your particular area of interest. You will develop classroom materials and use Cross-Angelo assessments to evaluate their effectiveness. You will attend monthly meetings with other project participants and write a brief final report.

Stipend amount = \$1000.00

4. **Other Classroom Research** - If you have not already been trained in Cross-Angelo classroom assessment, you will attend a training workshop January 14 and 15 ("If You Don't Understand Me, Raise Your Hand"). You will conduct a project relating to classroom teaching, working with the Classroom Research Project Coordinator, and use Cross-Angelo assessments to evaluate your project. You will attend monthly meetings with other project participants and write a brief final report.

Stipend amount = \$1000.00

If you would like further information about these activities, please contact Mary Anne Anthony at ext. 3253 or leave a message with Nga at ext. 6469.

An application form is attached. Please return it to Mary Anne Anthony's mailbox no later than Wednesday, November 21.

#52c1.intro91.app

CLASSROOM RESEARCH CONSORTIUM PROJECT
APPLICATION
SPRING 1991

Name _____

Department _____

Location _____ Phone _____

Courses you will teach in Spring 91 _____

Activity for which you are applying: (check one)

- _____ Cross-Angelo Classroom Assessment
- _____ Teaching and Learning in the Community College
- _____ Collaborative Learning
- _____ Learning Logs
- _____ Multicultural Curriculum Infusion
- _____ Computer Assisted Instruction
- _____ Other Classroom Research (Describe on the back of this page you topic, population of interest, planned activities, and expected outcomes.)

Return this form to Mary Anne Anthony's mailbox no later than November 23, 1990. Applicants will be notified whether or not they have been selected after December 1, 1990.

FOCUSED DISCUSSION GROUPS

Classroom

Research Consortium Project

Date: December 13, 1990

To: All Former Classroom Research Project Participants

From: Mary Anne Anthony

FOCUSED DISCUSSION GROUPS

Next semester, the Classroom Research Consortium Project will undertake a new activity: Focused Discussion Groups. A focused discussion group will be a scheduled meeting for any and all faculty interested in talking about a particular issue pertaining to classroom teaching (e.g., how do you get students to do outside reading, how do you form collaborative groups of students, etc.) Each issue will be up for discussion at two sessions during the same week, one on a Monday, Wednesday, or Friday and the other on a Tuesday or Thursday, so as to be accessible to most instructors. There will be two facilitators for each pair of sessions, myself and one of you, who will schedule and advertise the sessions, lead the discussions, take notes, and write up a summary paper after the session.

We'll try to have 4-6 focused discussion groups next semester. The facilitator for each group will receive a stipend of \$250.00, or the equivalent LHE.

If you are interested in being a facilitator for a focused discussion group, please complete the form below and return to my mailbox no later than January 10, 1991.

_____ Yes, I would like to lead a focused discussion group in Spring 1991.

_____ Your Name - Department

Will your spring schedule permit you to be free at the Santa Ana Campus 1-2 hours between 11:00 am and 2:00 pm on a MWF or TuTh?

_____ yes (Please tell us the exact time in which you are free)

_____ no

If you have any ideas for discussion topics, please list them here:

LET'S TALK TEACHING

Do you ever feel there is no place on campus to discuss issues relating to classroom teaching? Do you try to cram conversations with your colleagues about teaching ideas and problems into the ten minutes between classes? Are your department meetings too full of "business" to spend time talking about teaching?

Come and be a part of a focused discussion group! This semester there will be six scheduled meetings dedicated to sharing problems and solutions related to classroom teaching. Each discussion will focus on a particular issue and will be facilitated by an RSC instructor. The schedule of topics and dates is:

"Creating a community in the community college classroom"

Date: Thursday, March 21st 1-2pm

Facilitator: Melinda Womack

"Fundamental missing elements in schooling today -- thinking students?"

Date: Tuesday, April 2nd 12:30-1:30pm

Facilitator: Charlene Pearson

"Testing issues -- open book, notes, take home, frequency -- benefits and drawbacks"

Date: Wednesday, April 10th 1-2pm

Facilitator: Dan Goldmann

"Diversity vs. Division"

Date: Wednesday, April 24th 1-2pm

Facilitator: Fran Williams

"Ethics in the classroom -- cultural perspectives on cheating, plagiarism, etc."

Date: TBA

Facilitator: Jacque O'Lea

"How do you know when your students are learning?"

Date: Wednesday, May 1st 2-3pm

Facilitator: Marilou Morris

All discussions groups will meet in room A-47.

Plan to attend several! You don't need to have solutions to these problems to attend -- fellow commiserators are welcome, too! Mark you calendar today and RSVP to Nga at X6468.

#200/flyer.cr

LETS TALK TEACHING

"The Fundamental Missing Element in Schooling Today -
Thinking Students?"

Tuesday, April 2, 1991

12:30 - 1:30 (OK to bring lunch)

Room A-47

Facilitator: Charlene Pearson

Meet with other faculty to discuss the "student thinking crisis" at R.S.C. - how it impacts your curriculum, learning in the classroom, student services, retention, etc.

H.O.T. and
L.O.T.

Lets get serious about
a serious issue!

What teaching styles encourage
students to think?

Is there a problem?

At what thinking level
do students enter R.S.C.?

How to evaluate thinking skills?

What courses emphasize
higher order thinking skill
development?

What is higher order thinking?

What to do?

What is happening to
quality education at R.S.C.?

Should we lower curriculum
standards?

Does your curriculum perpetuate non-thinking
student syndrome?

Handouts

Methods that work and do not work
will be discussed

Let's Talk Teaching

Focused
Discussion
Facilitator:
Dan Goldmann



Date: Wednesday, April 10, 1991

Time: 1-2 PM

Place: A-47

TESTING ISSUES Benefits & Drawbacks

- TOPICS:
1. Frequency of testing -
find out the results of a study
at Harvard University
 2. Open book vs closed book
 3. Usefulness of study guides
 4. Surprise quizzes
 5. "Cheat-sheets"
 6. Flash - cards

Come and share the results of student surveys
and their thoughts about the topic.

BRING LUNCH - DESSERT PROVIDED



Let's Talk Teaching

Focused Discussion Facilitator:
Fran Williams

Date: Wednesday, April 24, 1991

Time: 1-2 PM

Place: A-47

DIVERSITY vs DIVISION

What is all of the hoopla about Diversity? Did we not fight against this very thing through integration? How can we possibly plan for diversity without dividing or segregating our students?

These questions are among the many others of this nature raised when faculty discuss the issues of the culturally diverse population present in today's classrooms.

"WITHIN THE CLASSROOM"

197

Within the Classroom

Rancho Santiago College

Classroom Research Consortium Project

Vol. 2, #1 September 1990

Mary Anne Anthony, Editor

Classroom research is fundamentally different from educational research. Its purpose is not to discover universal laws of learning, but rather for faculty to answer very specific questions about what students learn in their classrooms as a result of their instruction. The skills required to answer these questions are not primarily technical but call for systematic and sensitive observation of students in the process of learning.

A basic assumption underlying classroom research is that accurate and credible feedback about the impact of teaching on learning carries a built-in challenge to teachers to see if they can increase learning through experimentation with more effective teaching methods. Classroom researchers, then, are primarily interested in gaining insights that will strengthen their base of professional knowledge about teaching. They seek to learn what works, as well as why it works - all in order to become more effective in their role as teachers and facilitators of student learning.

Classroom research is more related to faculty development than to educational research. Yet, there is a difference. The specific goal of faculty development is to improve faculty performance by providing information about teaching skills, by increasing self-confidence, and by creating a supportive institutional climate that recognizes good teaching. Classroom research, on the other hand, focuses on student learning. The premise is that as teachers become aware of the impact of their teaching on their students' learning, they will make appropriate modifications to help students learn.

Source: "Leadership Abstracts" by K Patricia Cross

A REPORT ON A CONFERENCE ON CLASSROOM RESEARCH: USING ASSESSMENT TO IMPROVE COLLEGE LEARNING U.C. Berkeley, June 16, 1990

Myrna Sorensen

Throughout the conference some of the comments I heard were the following: Classroom research reduces the distance between teachers and students, improves student motivation, encourages students to think about their own learning processes, is learner centered, is mutually beneficial, is context specific, is action oriented, is ongoing, and is simple, quick and easy.

Classroom research attempts to develop connections between assessment feedback and teaching strategies and looks for ways to provide changes in the teaching, followed by new assessment.

Much of this conference focused on innovative ways to improve teaching combined with ongoing

assessment and research as these new methods were tried.

My first workshop on the adult learner in mathematics classes produced the following ideas: Use the adult learner's previous knowledge; start with application and work back to theory. Look for preconceived mental and experiential models as a basis for incorrect answers and remediate the model. Stress applications, especially those brought in from their experience in the job world, but also stress the ways of learning mathematics that can be applied in subsequent learning. Encourage students to look for patterns and to estimate. Concept mapping of a chapter is a useful technique. The class lists all concepts in a chapter. At home, students develop a hierarchy listing of

concepts. Back in class, students, working in groups, put concepts on Post-it notes and network them. Their results are put on a transparency and presented to the class.

The second workshop focused on the learning environment. The instructor used a welcome letter expressing his excitement about the course, some information about the course, including the textbook, and encouraging the students to look for ways to use the course in their lives. He also collected cards on the students interests and goals. These were returned at the end of the course. During the course he used music for relaxation and also sent out encouragement post cards ("It's a pleasure to have you in the course", "Let's talk about ____", "Be the best student you can be.") During the course he used the one minute paper with questions such as "The most important thing I learned tonight was ____"; "The ____ technique (eg., study guide, group, concept mapping) helps/doesn't help me understand the chapter better because ____"; "What I learned most by giving my presentation was ____". At the end of the class he used a learner evaluation form, with such questions as the following:

- 1) How does this class compare to other learning experiences?
- 2) In this class, did you feel involved in the learning process?
- 3) Did you perceive your stress level in this course to be higher or lower than in other courses? Why?
- 4) Did the relaxation techniques affect your comprehension?
- 5) How did music help?
- 6) Did the study guide technique help you to better understand the chapter and class discussion? Why or why not?
- 7) Identify a satisfying learning experience.
- 8) Overall this class was boring, exciting, relevant, repetitive, difficult, enjoyable, useful, interesting, a waste of time, pleasurable.
(Circle as many as relevant)

The third workshop was about Instructional Skills Workshops used at Cariboo College in BC, Canada. Instructors, as a flex activity, can choose to

participate in these workshops, each with five participants and two facilitators. The first day they are presented with a teaching model and then each day, for three days, each of the five instructors presents a five minute mini-lesson. The lesson is then evaluated by the other instructors indicating what it is like to be a learner in this situation. The structured evaluation is both written and oral. A video tape is used for further feedback. This technique allows instructors to improve teaching skills and to experiment with new techniques in a non-threatening environment.

The fourth workshop focused on a class designed to prepare reentry and disadvantaged students to do college level work. Each week students were required to read some material and prepare three questions. The first must elicit concrete information, the second must elicit an abstract response, and the third could be either type. The leaders stressed that assessment activities should get students doing, learning, thinking about the subject, thinking about themselves and their thinking in new ways, provide feedback to instructor and students, get students slightly uncomfortable together with support.

Classroom assessment is more than testing students on specific knowledge. Its purpose is to tell what is currently happening in my classroom and includes asking questions about how students are thinking and feeling about the material presented. Such questions encourage students to monitor their own thinking, their ways of learning and their attitudes about the subject.

LEARNING LOGS, SELF - DIAGNOSTIC LEARNING LOGS, OR WHATEVER

Gregory Pezzetti

In the last few days of the spring semester of 1990 at Rancho Santiago College, a baker's dozen, or so, of instructors met with colleagues from Rio Hondo Community College, who had been using the teaching technique of Self-Diagnostic Learning Logs in their instruction, and who were enthusiastic about sharing the results of their efforts. This technique is discussed in Classroom Assessment Techniques by K. Patricia Cross and Thomas A. Angelo (p.120 - 123) (Available in A-37). The RSC faculty members were all interested in employing

this technique in some of their sections in the fall of 1990 as a possible teaching-learning tool to facilitate student acquisition and retention of knowledge.

The Learning Log is a variation of the Keeping-a-Journal-Technique, which some disciplines have used with profit for a long time. The Learning Log requires students to record their reactions to information being learned so that they gain skill in recognizing the depth, or lack of it, of their understanding of these materials and can then take appropriate measures to promote mastery. Instructors, periodically reviewing these logs, may also achieve some insight into the effectiveness of their delivery techniques.

A good number of disciplines were represented at the RSC-RHC meeting. The Psychology instructors plan to give students in several sections of Introduction To Psychology the option of using the Study Guide that accompanies the text, or keeping Learning Logs. The Learning Log will require the student to keep a three-hole note book, in which the chapters of the text are outlined on the left page, and the right facing page will be divided into two halves vertically, the left half to be used for class notes relevant to the chapter outline and the right half to be used for learning log reactions of the student to materials being imparted.

Performance of students using the Study Guide will then be compared to performance of student using Learning Logs to attempt to get some idea of the Learning Logs' usefulness as a learning tool.

COLLABORATIVE LEARNING AND STUDENT SUCCESS

Priscilla McCarty

While most of the faculty at RSC were relaxing and recovering from a hectic spring semester, the faculty who will be participating in the classroom research project during the fall semester were involved in a series of training workshops on May 24th. Voiza Arnold, a faculty member at Rio Hondo College who has been successfully using the collaborative approach to learning in her classes, shared her knowledge and experience with faculty who will be trying this approach in their classes at RSC.

Faculty members learned that there is strong research evidence that the collaborative or cooperative approach to learning can increase students' success in college courses and is especially appropriate for minority students. Uri Treisman (faculty member at U.C. Berkeley) has pioneered the use of cooperative learning groups to significantly increase the number of minority students who are successful in math and science classes. The recent research project made public by Harvard University found that "students who study in groups do better than students studying alone." Benefits of the collaborative process are numerous and include:

the reduction in student stress as students work with each other instead of competing;

the opportunity for students to hear and discuss the views of others, to learn from each other, to develop more multiplistic views, and to gain appreciation of the view points and learning styles of other cultures;

increased opportunities for each student to relate actively and directly and in a personal manner to the concepts of the course;

the development of a sense of "owning" both the class and the course concepts by the student because of his/her more active involvement in the learning process.

In the collaborative process, the instructor assigns students to groups of three or four to work together on a group assignment. This group task must be clearly defined by written directions which define the time limit and the concrete product to be developed by the group. This concrete product can be an oral presentation in which all members of the group participate or a written assignment generated by the group. Students may take on different roles within the group, and all members of the group must be encouraged to participate in the collaborative process.

The instructor's role in the collaborative process is a multifaceted one if the collaborative process is to be successful. The instructor's role is:

to develop clearly defined group projects which will reinforce the basic course concepts or give the students the opportunity to apply basic concepts to a case study or a problem solving scenario;

to assign students to groups so that the best "mix" for learning will occur in each group;

to initially teach students how to use the basic collaborative process;

to monitor the progress of the groups in order to facilitate their success, but not to interrupt successful interactions;

to grade each group's concrete product so that students will take the assignment seriously and so that student learning is assessed.

Karen Dennis, Bonita Jaros, Priscilla McCarthy, and Cheryl Ooten will be using collaborative learning techniques in their classes this fall. Watch for the results of their projects in later issues of "Within the Classroom".

INTERCULTURAL COMMUNICATION

Assessing Cross-Cultural Dynamics in the Classroom

Carol Sigala and Susan Obler
Rio Hondo College

Do other students recognize the cultural basis of another student's comments?

"Oh, I see what you mean; I never thought of it that way before."

Do your students see the relationship between cultural vantage points and the course content?

"It just occurred to me that my high school history text book included only white males."

"Before I took this class, I thought all Native Americans shared the same culture."

Do your students ask questions about the course material that bring cultural issues to bear on the topic?

"How would this legal opinion have come out if the defendant were a black youth?"

"Now I see how a catastrophic health problem could force even our family into homelessness."

Do your students recognize that charts, data or diagrams are dominant-culture based?

"Gosh, I just realized that the food groups on the nutrition chart are all Anglo food!"

Do your students recognize the omissions and the biases in textbooks or films of people who are non-typical of mainstream America?

"I realize now that in the lit courses I've taken before that none of the stories had any disabled characters."

"Aren't these statistics from a small sample of voters in Orange County?"

In small-group assignments, do your students verbalize cooperative support for each other, regardless of background, in learning tasks?

"Listening to you makes me realize that I can learn more effectively from other people's knowledge."

Do your students risk making comments in small groups or in front of the class that are obviously cultural in context?

"Yes, but in my culture, suicide is a gift to save face for the family"

When your students are not assigned a group, do they group themselves across gender, ethnicity, and age - and across the room?



?? ??

ASK YOUR COLLEAGUES

Questions from last time:

Question: What do you do about students who turn in homework assignments late?



Suggestion: I accept it late - with a 20% deduction from the points available. (eg 10 point assignment becomes a maximum of 8 for that student). One of our part-timers does the same thing - but will only accept the late work at the next class. After that - too bad! (G.A.)

Question: What are some good ways to handle students wandering into class late?

Suggestion: We're implementing a "5 minute quiz" at the start of class - minimal point value, but enough that it will affect grade if late arrival pattern continues -for our lecture/lab combos. (G.A.)

Question: Is there appropriate dress for a college instructor?

Suggestion: I've often been complimented on my choice of clothing at school. I dress professionally because I see myself as a role model for my women students. Moreover, it shows my students I think my job is important enough for me to dress up for and hopefully they will think the class is important for them, too. (J.C.)

Editor's note: What do you think about these suggestions? Do you have any other solutions to these problems? If you have any thoughts on this subject, write them down and put them into Mary Anne Anthony's mailbox.



ON EDUCATION! Internationalizing California's Community Colleges

In the last quarter of the 20th century, due to changes in social, political and economic structures, all nations are explicitly bound in interconnected relationships. The current "international revolution" is significantly transforming the world as we know it. As a result, there is a critical need to establish internationally competent youth in our country and to prepare them to deal with the complexities of our world.

International competency requires more than international awareness. It signifies a deep understanding of the world, where people begin to think in international and inter-cultural terms; where

differences in response can be anticipated and understood merely as differences and not as right and wrong reactions; where one is constantly conscious of the different meanings and interpretations of the same words and expressions by people whose minds are conditioned by other languages.

The need to ensure international competency results in the creation of international education materials that are appropriate for all levels of education, including the community college.

In 1985, the American Association of Community and Junior Colleges recognized the importance of international education and encouraged the establishment of clear institutional goals and policies regarding international/inter-cultural education that advocates the values of the international dimension throughout the total institutional program.

Despite the proclaimed importance of international education, a 1986-1987 survey of 1311 community colleges concluded that 86% did not belong to international/inter-cultural consortia. Moreover, 51% of the colleges did not require an international content in the general education curriculum. Of the remaining 49%, "internationalization" was satisfied by offering Western History/Civilization courses (72%); World History/Civilization or Culture courses (37%); Non-Western History/Civilization courses (18%); other "international" courses (6%).

An underlying reason why many community colleges placed little attention on the development of such programs was due in part to archaic interpretations of the community college as being inappropriate institutions for promoting international education. In reality, however, international education was and still is vital to the community college, because it:

- a) serves the increasingly internationalized and inter-cultural community;
- b) teaches employable skills for entry into a job market whose context has changed dramatically;
- c) provides students with increased understanding and sensitivity on issues of local, national, and international importance (and hence is the foundation for effective citizenship training);
- d) is cost-efficient; many programs are money producing while others basically require the initiative and commitment of key faculty.

Despite the importance of international education, it was only in 1985 that the California Colleges for International Education Consortium (CCIE) was first formed.

Even though CCIE membership has steadily increased over the past few years, most California colleges remain at the very basic and initial stages of developing international education programs, starting first with the student study abroad programs. Those few colleges that have stable student study abroad programs have expanded to other areas of international education, namely internationalizing the curriculum. Nonetheless, there are only 14 California community colleges with established international curriculum programs, and another six colleges are in the process of creating such programs. Hence, although higher education institutions are becoming more internationalized, the rate of change for the California community college is very slow.

In the community college, internationalizing the curriculum occurs in individual classes or in connection with an international studies program. Several colleges have "internationalized" specific general education courses, especially in the social sciences and English disciplines. One of the more successful programs is sponsored by the Los Angeles Community College District, whose faculty have created over 200 different International Master Modules (internationalized lesson plans) encompassing over 50 different disciplines and have developed several new courses that encompass an international perspective.

Other colleges that have internationalized individual classes include Glendale College (five subjects in social sciences, business, and English), Laney College (selected social science classes), Napa Valley College (12 social science and humanities classes), San Francisco City College (one English class), and Ventura College (one comparative government class).

International studies programs either focus on general education classes or business classes. In 1988, Santa Barbara College became the pioneering California community college to initiate a specific International Studies general education degree program. In 1989, a progressive

multicultural studies program was successfully instituted at West Los Angeles College, and within the past year Allan Hancock, Chabot and Moorpark colleges have all initiated similar international studies programs. In these programs, students select a field for emphasis in either international business, international relations, or international studies and then supplement these classes with additional required "internationalized" classes, usually in the social sciences and foreign languages.

In California, the most frequently found international studies program is the international business program. Coastline, Foothill, Orange Coast, Rancho Santiago, Saddleback, Ventura and Vista colleges all have established international business programs. Foothill, Orange Coast, and Vista Colleges offer AA degree and certificate programs in international business. Currently, El Camino, Fullerton, and San Jose colleges are in the initial planning stages for establishing their own international business programs.

International business programs are typified by Coastline and Orange Coast's program which offer a four-part interdisciplinary approach combining a) international business studies; b) general business management studies; c) international area, culture and geography studies; and d) foreign language studies. One of the most unique programs, San Jose City's Pacific Rim Studies Program, combines a general business degree with a broad international business emphasis, highlighting the Pacific Rim.

To summarize, an internationalized curriculum provides new employment opportunities, promotes intellectual stimulation, prepares students to meet the challenges of rapid economic and political changes in the world and encourages stronger ties between community and college. However, for an internationalized curriculum to prosper, the college itself must become internationalized. This mandates that several conditions be realized:

- 1) Include international education as part of the college's educational philosophy and provide resources, opportunities, and genuine administrative support for various international education programs;
- 2) Secure a clear definition of international education to counter the popular reference to international education as consisting solely of student study abroad programs;

- 3) Overcome apathy; resistance to change, and parochialism in educational policy;
- 4) Offer enticement for faculty, such as mini-grants, release time, bonus points and encouragement from the chancellor;
- 5) Provide developmental programs, such as workshops that will increase faculty interest, enthusiasm and further their cross-cultural sensitivity and knowledge of international issues;
- 6) Create an international library or resource center;
- 7) Encourage first-hand knowledge obtained by teachers who either have conducted study abroad classes or who have participated in faculty exchanges;
- 8) Involve the college in international education consortiums that provides reinforcement and support for both the creation and dissemination of various international curriculum techniques;
- 9) Enlist the help of an international education specialist who directs faculty in the internationalization of their classes.

Now more than ever, a comprehensive program of international education for the community college becomes not only essential but critical. To quote the Commission on International Education of the American Council on Education 1984 report: "International education programs are no longer optimal for community colleges, they have become integral."

Source: *Global Pages*
Spring 1990, Vol 8 No 1



Within the Classroom

Rancho Santiago College

Classroom Research Consortium Project

Vol. 2, #2

December 1990

Mary Anne Anthony, Editor

CLASSROOM RESEARCH CONSORTIUM PROJECT

Twenty-two RSC faculty members are actively involved this semester in the Classroom Research Consortium Project. The group has met monthly to discuss classroom teaching and ways to evaluate its success. The instructors have been full of wonderful ideas for ways to get student input about course expectations, comprehension, climate, and responsibilities.

Here is a list of 20 assessment questions, quick and easy to administer in class, and easy to adapt to fit into any discipline.

At the start of the course:

What are your goals for this class?

Name 4 things you want to learn in this class.

What is your background, with respect to this class?

What are your worries and concerns about this class?

To assess comprehension of course material:

What do you think of when you hear the word _____?

What was the most important thing you learned last week?

What was the clearest point of today's/yesterday's lesson?

What was the muddiest point?

Give a brief definition of _____?

To assess classroom "climate":

How do you feel about working in group?

How do you feel about giving/receiving criticism from your fellow students?

What would you like more of, what would you like less of in this class?

What do you like best/like least about this class?

Are we spending the right amount of time on various class activities?

To focus students' responsibilities:

Rate your attendance to this class.

How much time did you spend on homework last week?

Did you get the grade you expected/wanted on this last test/paper/midterm?

What changes are you going to make to get the grade you want in this class?

What changes in instruction can help you get a better grade?

Rate your commitment to this class.



MULTICULTURAL & GLOBAL EDUCATION DEFINED

Laurien Alexandre

Multicultural education has been variously defined as teaching to an ethnically diverse student population by focusing on classroom techniques that recognize pluralism as well as teaching about ethnically diverse populations by focusing on classroom content which teaches the histories, values and perspectives of diverse groups. According to practitioners, "Multicultural education is a term used to describe a variety of efforts toward expanding the instructional program to encompass the heritage and experience of all children." Multicultural education, and its more specific form, ethnic studies are about domestic pluralism, culture contact, culture conflict and culture integrity.

Continues on page 5

A PERSONAL VIEW

Nga Pham

My parents have and will always be my greatest source of inspiration and emotional support. I have always relied on them for their wisdom and guidance. Even though they live in Mississippi (where the family has lived since I was 8 years old), they continue to be the most influential and dominant force in my life who I will always turn to for support. In addition, I find the great comfort and inner strength in my religion.

From the moment I step into the classroom door, people stare at me. They want to make it clear that I'm different. It was always frustrating to have to prove myself to them that I'm no different just because of my physical appearance. In time, however, I have come to accept that I am unique and have a different background, values and goals than others. My parents have always encouraged their children to go far in education. Education offers us the opportunity to accomplish all those dreams our parents were unable to reach. It's a chance for us to make a better life for ourselves and have more control of our future. I believe that I can reach all the goals I set for myself if I'm willing to accept the challenges along the way. To other students, education is only an option, to me it's everything!

I see many students giving up too easily. They do not have the commitment that I do. I put forth all my efforts to obtain my degree. I remember the first semester of my senior year, I was pretty fed up with working, cooking, cleaning, and studying. I just wanted to quit and be free. I resented it when my friends were going out and enjoying themselves while I was home studying. There were also family events, which are very important to me, in which I could only go for a little while. My family and friends did not always understand, and I'd be criticized for not "wanting" to spend time with them.

I also had financial difficulties. My parents were unable to support three children in college, with two more still at home. I had to work part-time and apply for financial aid, scholarships, and student loans. My two brothers and I lived together and saved enough money to stay in school. We had a couple of hard years, but I do not think it would be any harder than if we were still in Vietnam, working in the field and trying to stay alive. Sure, I had to sacrifice a lot and resented having to give up so much; however, it was a decision I have never regretted.

Continues on page 5

AN IDLE FANCY REALIZED

Tich Van Nguyen, RSC student

Many a time I was chuckling to myself over the fact that I took the fancy to enroll myself in Rancho Santiago College to study ESL. All my relatives and friends asked me what I study English for; why I take the trouble to walk twelve miles everyday to study such a difficult language for nothing. For nothing because I study English not with the aim of seeking a job, or of being transferred to a University to get my MA, seeing my old age of seventy four. To them, once getting tired with studies, it is with the hope of having a job or, at least, a fame. That is not my opinion, my contention, my conception. I am studying English merely to study English. That's all. I have a queer contention: "Living targetlessly. It seems very strange to you, Occidental people who cannot understand our Oriental philosophy. Do not ask me why. I won't explain it because I do not have enough vocabularies to explain it. I can only tell you simply that I do not want to be entangled in an only one target, which prevents me from doing other things that are also important, and which would make me unhappy if I could not reach it.

The only thing that makes me look ridiculous, bold, extravagant is that with my very tiny knowledge of English language, how I dared venture to enroll in RSC to study English. I was supposed to enroll only in Lincoln Education Center or in other centers of this kind intended to beginners.

Recalling about my first day in ESL 105 class with Ms. Ono as teacher, I see myself really funny. I could not understand anything she said. I was sitting in my classroom making as if I was listening attentively to

NO MATTER
HOW LATE IT IS,



IT'S NEVER
AS LATE
AS IT WILL BE,
LATER ON.

208

Continues on page 5

CULTURAL DIVERSITY PERSPECTIVE

On Friday, September 28th, seven RSC instructors* attended "Teaching in the '90s", a conference sponsored by Cerritos College. The conference focused on three themes: new technology, cultural diversity, and global studies.

The keynote speaker was Dr. Carlos Cortes from UC Riverside. He spoke about how to meet the challenge of teaching and learning in a diverse society. He looked at our nation's motto "E Pluribus Unum", which means "from many, one" and categorized people working in our diverse society as:

"pluribuses"—if they emphasize the unique differences among groups of people,

"unums"—if they try to mold everyone to be the same, and

"EPUs"—if they attempt to achieve a balance between the two the categories.

Dr. Cortes said that as community college instructors we would be helping our students by empowering them to function within the mainstream of our society, by preserving their various cultural differences so they can be used as a resource in our global society, by sensitizing them to become role models within their cultures, and by teaching them to care about their civic responsibility towards our nation and all people of the world. He stressed that he expected newcomers to our country to become acculturated to the ways of the majority, but that they should only become assimilated into the majority if it was by their choice.

Dr. Cortes will be here at RSC during January flex, as one of the speakers during Common Teaching Week. I'm looking forward to hearing what else he has to say on this very timely topic.

* Sherry Allen, Mary Anne Anthony, Caroline Baca-Frye, Betty Dixon, Priscilla Leathers, Elizabeth Macey, and Fran Williams.

"TEACHING IN THE '90s" CONFERENCE

Betty Dixon

The addresses and workshops for the September "Teaching in the '90s" conference sponsored by Cerritos College was an impressive one: "Teaching and Learning in a Diverse Society," "Classroom Research and the Diverse Student," "Innovations for the '90s," "Technology and Higher Education," and "When I Can't means I Won't—Cases of Learning Resistance." There were other as well, but these caught my attention.

Reflecting on my notes from these sessions, the following "bullets" are worth further consideration as we plan programs, deal with an increasingly diverse student population, and expand current technology available to students.

- * The 90's will not dwell on basic skills, but rather on advanced skills involving problem solving and critical thinking.
- * The most effective teaching will depend on the psychological safety we create in our classrooms.
- * Learning is not an event; it's a process.
- * Sadly, the recent blitz of bad reports about education never talk about teaching.
- * Evergreen College is creating student communities by assisting students in enrolling in three of the same classes, so as a group they have learning companions led by three instructors.
- * In all of California 197 black students transfer to the University of California from community colleges.
- * Glendale Community College in Arizona has linked all campus computers together in one giant family in a huge facility. Courses have support material here and both faculty and students use it. It's open 24 hours a day, 7 days a week.
- * The need to recognize quality teaching and outstanding faculty should be a high priority of every institution that wants to be regarded as a pace-setter in providing quality education.

?? ??

ASK YOUR COLLEAGUES

Question: If students in your class are working together in groups, do you let them speak in their own languages?

Question: In figuring out final course grades, do you drop the lowest test score? Why or why not?

Question: How much weight do you give the final examination?

Editor's note: Please drop me a note with your comments on any of these questions, or with any questions you'd like to see brought up in this column.



ELEPHANT TRUNKS, ST. PETER, ETC.

One Thursday I was reading the food section of the newspaper, with my 7-year old son looking over my shoulder. I noticed he was intently studying one of the drawings in the ad for a local grocery store chain, and finally he asked "are those elephant trunks?"

I wondered if I should make an appointment with the optometrist; the picture was of chicken legs (whole - legs and thighs).

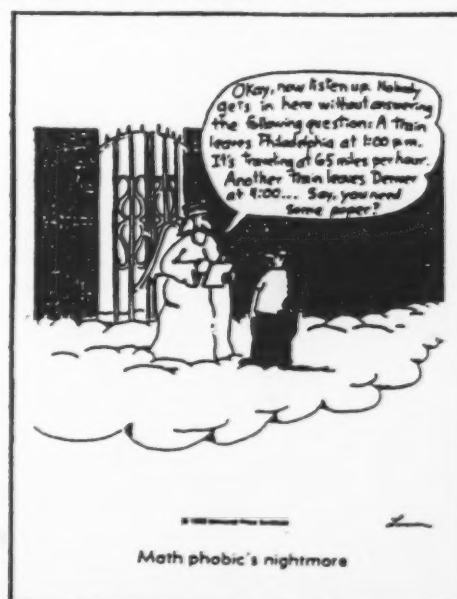
Reading grocery store ads is not one of the things my son is accustomed to, reading books about animals is more in his line. He wouldn't know what is

"usual" for a grocery store ad and what isn't, so his question wasn't necessarily a sign of a visual problem.

What if you were to find yourself in a country where it is normal to see pictures of elephant trunks in the newspaper food sections? How many other "oddities" would you encounter in going about your life every day? How many faulty assumptions would you be making about things you heard and saw?

Is that how some of our culturally diverse students feel here at RSC?

I saw one of our foreign students puzzling at this cartoon is displayed on the door to the math department offices in Hammond Hall:



What background knowledge do you need in order to understand the humor? Is the background knowledge unique to our American Culture or is it common knowledge worldwide? Is the symbolism too Judeo-Christian? Do only teachers and students of mathematics find it funny?

We have here at RSC international students from 50 different countries, hundreds of immigrants to this country, and still others who were born in the United States but speak a language other than English in their homes. Do they see elephant trunks when we talk in class? Let's all be sympathetic to their efforts to acquire an education in a language and culture as strange to them as the grocery store ads were to my son.

MULTICULTURAL & GLOBAL EDUCATION DEFINED

Continued from page 1

Global education is not far afield. It has been defined as education for an interdependent world, and although the world has always experienced dependencies/interdependencies, this educational movement focuses on past, present and future ecological, demographic, political, economic and cultural linkages. It uses an interdisciplinary approach to introduce students to the debates which surround quality-of-life issues in communities throughout the world. Under the umbrella of global education, courses and educational programs should, according to one practitioner, "Provide students with an opportunity to review and critically evaluate the assumptions of all legitimate worldviews.

(Source: "Global Pages", Vol. 6 No. 4)

A PERSONAL VIEW

Continued from page 2

In school, I interacted with classmates but with caution. I usually participate in discussion only if I know my comments/ideas will show my creativity and be valued by others. When I feel hostility in class, I usually fade into the back of the room. At times like these, I feel very intimidated being an Oriental. I know others feel just as uncomfortable as I do because they do not know how to approach me.

The main conflict that exists between my classmates and myself is that they have certain expectations of me; and often those expectations are unrealistic. For example, when I'm put into a group, the members expect a quiet person they are going to have problems with because they think my English is poor. They expect low grade because of my inability to contribute; this usually brings in bitterness. Contrary to their beliefs, I have been raised in the US for 15 years and I am not the type who sits around and let others determine my future. In one class, when I saw the group coordinator not showing any leadership and the group not going anywhere - I took over! I got the discussion going, defined our goals and steps to overcome in order to reach the final product. We then assigned roles to each other and got the work done without the coordinator. Everyone was very surprised at my role in the group. They even told the instructor that I was the "real" coordinator. Of course, the instructor realized that from the beginning. However, he too was very surprised because "Oriental

students tend to keep their opinions/ideas to themselves!" For my participation and effort, I was given an "A" in the class.

At home, it is critical to have family support. It's bad enough to have to go through administrative red tape and overcrowded classes without having to go home and face people who cannot seem to understand why you don't have time for them. Because my parents and family support my education, I did not have as much conflict as other girls of similar background. However, there were many! Sometimes, I'm seen as this "intelligent" person who has gone out of her way to make a life for herself, at others I'm this "stuck-up" person who has separated herself from her "kind." Being a Vietnamese female, I was still expected to report where I was going, for how long, for what reason, and what time I would be home. I was torn between the two lives.

Finding adequate studying time was hard for me. While I realized I must complete my assignments, my home duties must be completed before I can sit and study. My many duties include cooking, cleaning, and washing for the family and still working and going to school. My studying times were those few moments in which there were no other demands on my attention.

If I had to repeat my college years again, the things I would change include: be more receptive to others, be more patient, and take things one-at-a-time. I have realized that I'm not the only one different, but that at one time or another, other people may feel different in situations that I may not. Being different does not always have to be negative. I'll get the opportunity to try this theory out when I go back in Spring 1991 for my MPA (Master of Public Administration).

AN IDLE FANCY REALIZED

Continued from page 2

her; in reality, I was exactly like a duck listening to thunder; I didn't understand in the least. If some one else had been in my place, he would have withdrawn from the class by sneaking out of it to take French leave. Unfortunately (or fortunately?) I was charmed by Ms. Ono's voice, a sweet comforting voice that could make the most despondent, desperate people, feeling comforted, solaced, brighten up to enjoy their life. I stayed there, feigning to understand all her explanations; and, at the same time, tried to do my best to catch up with my classmates.

I had to buy an English grammar book having a rather long name "Understanding and Using English Grammar" by Betty Schramper Azar. I devoured it days and nights at home. With the guide of my knowledge of the French language, I at last, came to understanding that book, which I had taken for a cloying one. That was the first time in my life to be taught by an American teacher at an American school. Everything seemed very strange to me. The first thing that caught my eyes is the aspect of the classroom where students wore all kinds of clothes according to their fancies. That was very different from our way in Vietnam where clothing is very formal: students must wear, if not uniform, very correct clothes, which make them look serious, but much older than their age. Then the way the students spoke to their teacher too freely, sitting with one leg over the other, or with both legs on another chair in the semi-lying position. In Vietnam, if a student happened to speak to his teacher, he should stand up and speak politely without even a slight laugh, which makes the classroom lack intimacy. The way Ms. Ono talked with her students was also remarkable. Now and then she said a joke while explaining the lessons, which made the classroom have a cozy and intimate atmosphere of a family. That made me forget my nostalgia. As for her teaching, first thought unsurpassable. It was wonderfully admirable. No one could complain not understand what she had explained, even me with my so little comprehension in English language; especially with my clumsiness due to the dotting of my old age. She knew it; she knew the individual ability of each student. She tried hard to make me understand what she was teaching. That was something people thought impossible. However she could, ultimately, reap a somewhat good result although very modest: "I could write English rather correctly." She was very pleased. And that what I hoped while trying to do all my best to make her not disappointed, intending to make up for her conscientious devotion in her task of a teacher.

I first thought that that was a exceptional case, and she was an exceptional teacher. I was wrong. Under the marvelously ingenious teaching of all other teachers of mine, such as Mrs. Miriam Burton in Speech 102 class, Mrs. Bonita Jaros in ESL 110 class, Mrs. Marilou Morris in Speech 103 class, I see my English improved every day. They all always try to help me, their most stupid student, make progress in my studies, seeing my non-profit fondness of writing and speaking English.

Through what and how I was and am taught in all my classes by all my respectable teachers, including Ms. Lynda Kennedy, my teacher in Computer 100 class

and Mrs. Laranjo, my teacher in Office technology 035 class, I perceive that there are diverse teaching methods in education in the US. Teachers are free to choose their own teaching methods they think suitable. There is no standardized curricula, so never two courses are identical. Only their egalitarianism in their way of treating their students, their skillfulness, their devotion in their task, their sociability, their kindness shown to their students, and their awareness of their position of authority are identical.

CLASSROOM RESEARCH TRAINING HELD AT RIO HONDO COLLEGE

Caroline Baca-Frye

RSC faculty were invited to participate in Dr. Tom Angelo's Classroom Research training session held October 6, 1990, at Rio Hondo College.

Dr. Angelo, former UC Berkeley professor was sponsored by Rio Hondo College Staff Development to train community college faculty in classroom research techniques. He described classroom research as learner centered, teacher directed, action-oriented, context specific, and intellectually challenging.

Dr. Angelo modeled and trained community college faculty in a number of classroom research techniques such as focused listing, a classroom technique that asks students to list ideas that are critically related to an important course topic. Dr. Angelo had faculty write a short structured assignment. The assignment was designed to provide feedback on students' analytic and writing skills. Faculty were exposed to techniques that assess student academic skills and techniques that assess student reactions to course materials, teaching methods and assignments.

The one-day workshop on classroom research encouraged participating faculty to study how and what students learn, encouraged faculty to develop one learning goal per class and described various assessment methods that would allow teachers to gather feedback and follow student learning progress.

Within the Classroom

Rancho Santiago College

Classroom Research Consortium Project

Vol. 2, #3 March 1991

Mary Anne Anthony, Editor

"... Let me sum up my assertion that teaching can be improved by practicing it at a more sophisticated and professional level by making an analogy to farming. A successful farmer is judged by the quality and quantity of his crops - not by whether he wears bib overalls or rises with the sun. A farmer's attention is concentrated on understanding the nature of the things he is trying to grow. He knows that some plants require four hours of sun a day; others do well in shade. Some plants are drought resistant; others require irrigation. Some plants require one kind of fertilizer; others something else. The point is that the farmer's actions are determined by the needs and nature of his crop.

We haven't reached that point in teaching yet. Teachers' actions, especially at the college level, are determined more by the predilections, personalities, and perceptions of the teacher than by the needs of the students. We have not done the extensive research and experimentation that characterizes scientific agriculture. We don't really know why some students thrive and others don't. We don't observe whether the seeds we plant take root. We can't detect wilt, and even when we see the beginning signs of boredom or disengagement, we don't take immediate steps to treat it because we assume it's the nature of the plant to wilt - or more often perhaps because we did know how to treat wilt or we don't have time. It is hard to imagine a farmer not being challenged by wilt or not having time to treat it. It is also hard to imagine him treating wilt in plants that don't have it simply because treating wilt is what is on his agenda for that day. If, of course, he doesn't recognize wilt or has no idea what causes it, he may have to ignore it and lose his crop.

Teaching today is more like home gardening than like scientific agriculture. Care, attention, and experience will certainly result in better crops than neglect, and some home gardeners get wonderful results. By and large, teachers, like home gardeners, learn from experience as they go, without much understanding of how students learn or how to increase the productivity of their teaching."

Source: K. Patricia Cross (January 16, 1991 speech at Rio Hondo College)

CLASSROOM RESEARCH CONSORTIUM PROJECT - SPRING ACTIVITIES

This semester the Classroom Research Consortium Project has moved into a new area - Computer Assisted Instruction. Jacque O'Lea, who teaches Adult Basic Education, is assessing her students' perceptions of the various software they use in class. Greg Pezzetti is writing some CAI units for his Introduction to Psychology class; he is comparing test performance of students using these modules with the students who do not.

Another new activity in the project this semester has three RSC instructors attending a weekly class at Rio Hondo College. The class, "Teaching and Learning in the Community College", is being taught by Dr. Tom Angelo. Myrna Sorensen, David Hartmann, and Don Roylance will be reporting back to all Classroom Research

Consortium Project participants about their class and will have a workshop during next year's flex to share their new knowledge with interested colleagues.

This semester will again have RSC instructors experimenting in their classes with the use of learning logs and co-operative learning. Elizabeth Macey, Bonita Jaros, and Roseann Cacciola are having their students keep logs of their learning experiences. Students in classes taught by William Blake, Cheryl Ooten, and Grace Tanaka will be doing several co-operative activities.

In the area of cultural diversity, Caroline Baca-Frye's Introduction to Counseling students are looking at the way people of different

backgrounds emphasize the importance of education, among other values. Sherry Allen has asked her ESL students to compare how they learned vocabulary in their native languages with how they are learning English vocabulary now. Wayne Gibson is investigating whether a person's native language affects how he/she learns mathematics. And Karen Dennis is finding out how students of various cultures react to the variety of teaching modes available in her Continuing Education classes.

Finally, just getting their feet wet in the area of Classroom Research, are Jane Francis and Sun Ok Myong. They participated in a flex workshop on Cross-Angelo classroom assessment during January flex and are now trying some of the assessments in their classes.

The entire group of Classroom Research Consortium Project participants meets monthly to discuss what they are doing in their classes. The meetings are open to anyone interested in learning more about Classroom Research at RSC. Meetings are scheduled on Friday afternoons from 1-3 pm in room A-47 on April 5 and May 3. Please come and join the discussion!

? ? ? ?

ASK YOUR COLLEAGUES

FOCUSED DISCUSSION GROUPS

Do you ever feel there is no place on campus to discuss issues relating to classroom teaching? Do you try to cram conversations with your colleagues about teaching ideas and problems into the ten minutes between classes? Are your department meetings too full of "business" to spend time talking about teaching?

Come and be a part of a focused discussion group! This semester there will be six scheduled meetings dedicated to sharing problems and solutions related to classroom teaching. Each discussion will focus on a particular issue and will be facilitated by an RSC instructor.

The schedule of topics and dates is:

"Creating a community in the community college classroom"

Date: Thursday, March 21st 1-2pm
Facilitator: Melinda Womack

"Fundamental missing elements in schooling today -- thinking students?"

Date: Tuesday, April 2nd 12:30-1:30pm
Facilitator: Charlene Pearson

"Testing issues -- open book, notes, take home, frequency -- benefits and drawbacks"

Date: Wednesday, April 10th 1-2pm
Facilitator: Dan Goldmann

"Diversity vs. Division"

Date: Wednesday, April 24th 1-2pm
Facilitator: Fran Williams

"Ethics in the classroom -- cultural perspectives on cheating, plagiarism, etc."

Date: TBA
Facilitator: Jacque O'Lea

"How do you know when you students are learning?"

Date: TBA
Facilitator: Marilou Morris

All discussions groups will meet in room A-47.

Plan to attend several! You don't need to have solutions to these problems to attend -- fellow commiserators are welcome, too! Mark your calendar today and RSVP to Nga at X6468.



LEARNING LOGS IN ESL

Sharon Allen

Last fall semester I used learning logs in my ESL Intermediate III class. At the beginning of the semester I attempted to set up fairly formal logs. I had students write what we had done in class on the left of the page and their response to it on the right. They could ask questions, comment, take notes, etc. I found them to be struggling and generally answering with short, simplistic comments. I tried changing the way I structured the activity: instead of dividing the paper and having students write what had happened and their response, I instead made it more flexible and asked them to write about something they had heard or read or thought while they were in class. The last fifteen minutes of class were devoted to this. I made the assignment randomly during October and on a daily basis in December. I often used response cards to get reactions to the journals from students.

After three consecutive weeks of writing daily, I asked students to do a five minute paper on the pros and cons of journals. I was pleasantly surprised at their responses. I would have anticipated about sixty percent positive responses and 20% negative with 20% not answering or being neutral. In reality, 19 students responded and eighteen asked that we continue the process. Several students asked for more structure and three asked that we write three or four days a week rather than every day.

Sample comments from students' papers:

"It is very good one can learn more English because every day one tries to think in English."

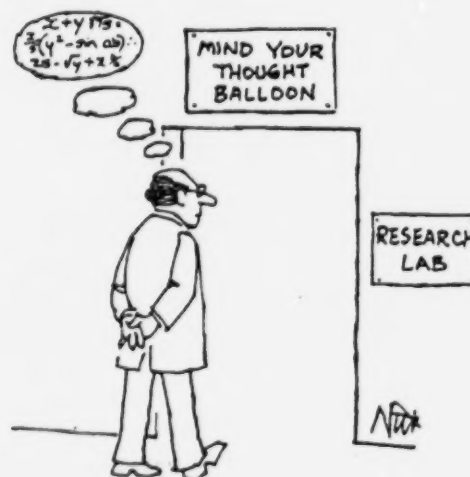
"I'd rather write in the journal one time a week because writing still my problem. I can't handle it. So if I write in it every day it will make me frustrated." (negative comment)

"I want you check grammar."

In conclusion, I will use journals again. I think I will try three days a week to begin and then reevaluate. Also, I will try assigning a topic each day, but then saying, "or write about any thing you want to." I also will try to devise a regular collection process, maybe by table, so that I see each journal and comment more often. Hopefully,

I will see each journal once a week. I may also give the students the option of marking one entry each week for me to correct grammatically.

The project has been more interesting than I expected. The students' entries have helped me to focus lessons on acculturation as well as specific grammatical points of confusion or interest. Originally I wondered if taking this much time out of a class period would be worthwhile. In an ESL class, asking students to write for a shorter period of time would be too frustrating and limiting. Therefore, the fifteen minute time period seems a minimum. After last semester, however, I am convinced that having students write frequently is worth the class time spent on it.



MARCH 1990

COLLABORATIVE LEARNING IN TRIGONOMETRY

Cheryl Ooten

The class that I chose to use for my Collaborative Learning Project was a small Math 160 trigonometry class. After the first 3 weeks of classes, the class settled to a size of 12 students.

I used workshops weekly within the classroom based on the Uri Treisman U.C. Berkeley model. The classroom format in the beginning was 3 days of lecture and 1 day of workshop. On the workshop day, I gave the students a worksheet with challenging problems covering the topics we

had been working on. (These worksheets were prepared by myself or Jane Francis.) Students worked on these worksheets in groups of 4 within the classroom. (Review worksheets were given the day before each exam.) I served as a facilitator to get students to ask each other questions and compare answers rather than asking me. I circulated in the classroom clarifying group misunderstandings rather than individual student misunderstandings.

After about a month and a half, the class formed two workshop groups, instead of three, and each student knew the other 11 students within the classroom by name. The lectures sometimes became more group work with students working together in teams at the blackboard. The entire graphing unit was completed as a group activity.

Throughout the semester, I used Cross-Angelo techniques to check on the students' opinions about the group work. They seemed very enthusiastic about working together, recognizing both the benefits and the liabilities if it were done too much.

At the end of this semester, the classroom atmosphere seemed to me to be one of more cooperation and interest in trigonometry than any small class I have had before. The students seemed to be integrating the material better because of their activity within the classroom. They did not just take notes and do homework. They discussed the problems with each other and corrected themselves. They had no hesitation about working problems publicly on the blackboard. The atmosphere was one of acceptance rather than criticism or fear. One major concern for me was student absences, but I believe these were the result of outside jobs, illness, and sports activities rather than disinterest in the class.

For me, the workshops, group work, and Cross-Angelo assessments have made the course one of the most satisfying teaching experiences I have had. I knew my students' abilities better than if I had only seen homework and tests. I saw them discuss and work their problems publicly and was able to assess daily what they knew and didn't know. I believe that I did almost everything that I know possible to teach them and to support their learning. This was my second semester using workshops within the classroom. I expect to continue using them whenever possible because I have seen the benefits so clearly. I do not think the workshops keep any more students in the

course but I do believe that the students who finish definitely know more than if they did not have the workshop experience. I also expect that I will continue using Cross-Angelo assessments because the results are so interesting to me and seem to be to the students.

ASSESSING A.B.E.

Ethel Jordan

I have enjoyed using classroom research techniques in my Reading and Adult Basic Education classes at the Orange Adult Learning Center. I seemed to get the most useful responses when I used focused listing and 1-or 5-minute paper techniques, so I used those the most often. The students seemed to be able to express their feelings more easily with those approaches. The techniques were easy to manage with the 3x5" cards.

The use of the classroom research techniques has influenced my teaching in several ways. Since I usually asked for the student responses just prior to the break time in my 3-hour classes, I could quickly look through them during break and summarize the findings with the class after break. In so doing, we not only did a quick review, but I was able to catch misunderstandings before the students had completely finished the assigned work. I used the assessment information later on when planning the next lesson. It helped me remember the areas of confusion and include them in the review, making it more specific.

Changes occurred both for my students and for me as a result of using classroom research. Perhaps the most powerful one for my students was the enhanced feeling of freedom to express opinions. The idea of anonymously reporting about learning was a new one to most of them. I also think that they have a deeper understanding of my concern for their success.

As the instructor, I felt that the classroom research techniques gave me the capability to respond more quickly to my students' needs. Since I work in an open-entry/open-exit program, I don't always see the same students. Classroom research helped me be more effective in clearing up confusion during the same class period rather than after assignments had been turned in. I plan to continue using classroom research techniques in my classroom.

ERIC Clearinghouse for
Junior Colleges

MAR 13 1992